Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Robert J. Weld
Regional Director

Title V Federal Operating Permit
Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act and 9VAC5-80-50 through 9VAC5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Solutia Inc.
Facility Name:	Eastman Performance Films, LLC
Facility Location:	4210 The Great Road Fieldale, Virginia 24089
Registration Number:	30294
Permit Number:	BRRO-30294

This permit includes the following programs:
Federally-Enforceable Requirements – Clean Air Act

March 24, 2022	March 23, 2027
Effective Date	Expiration Date
March 24, 2022	
Signature Date	Robert J. Weld, Regional Director

Table of Contents, 1 page
Permit Conditions, pages 8 through 78
Attachment – Test Report Format

Table of Contents

Facility Information

Permittee
Solutia Inc.
P.O. Box 66760
St. Louis, MO 63166-6760

Responsible Official
Andrew Campbell, Operations Manager

Operator
Eastman Performance Films, LLC
P.O. Box 5068
Martinsville, VA 24115

Facility
Eastman Performance Films, LLC
4210 The Great Road
Fieldale, VA 24089

Contact Person
Arun Gokhale, Environmental Specialist
276-627-3238

County-Plant Identification Number: 51-089-0035

Facility Description: NAICS code 326130 – Laminated Plastics Plate, Sheet (except Packaging), and Shape Manufacturing

Eastman Performance Films, LLC (Eastman) is a manufacturer of solar controlled window film; the Fieldale facility consists of four dye baths that dye the film prior to further processing by the laminating and coating machines. The facility is a Title V major source of volatile organic compounds (VOCs) and Hazardous Air Pollutants (HAPs). This source is located in an attainment area for all pollutants, and is a PSD major source for VOCs. The following regulations in 40 CFR Parts 60 and 63 apply to Eastman:

- 40 CFR 60 Subpart JJJJ: *Standards of Performance for Spark Ignition Internal Combustion Engines* (applies to Emergency Generator 44D)

- 40 CFR 63 Subpart JJJJ: *National Emissions Standards for Hazardous Air Pollutants (NESHAP): Paper and Other Web Coating* (applies to coating lines)

- 40 CFR 63 Subpart ZZZZ: *NESHAP for Reciprocal Internal Combustion Engines* (applies to Emergency Generators 44A, 44B, 44D and to Emergency Water Pump 63)

- 40 CFR 63 Subpart DDDDD: *NESHAP for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters* (applies to Boilers EU05 & EU37 and to Process Heater EU11)Emission Units

Emission Units

Equipment to be operated consists of:

Fuel Burning Equipment

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description*	PCD ID	Pollutant Controlled	Applicable Permit Date
05	B05	Eclipse Lookout Boiler (Natural Gas)	10 MMBtu/hr	--	--	--	--
011	D07a & D07b	Therminol Heater for Dye Line 7 (Natural Gas)	4 MMBtu/hr	--	--	--	--
37	37	Peerless Boiler (Natural Gas)	1.8 MMBtu/hr	--	--	--	--
44A	N/A	Kohler Emergency Generator Model 20RZ (Natural Gas)	0.28 MMBtu/hr (input) 41 Bhp/19kW (output)	--	--	--	--
44B	N/A	Caterpillar Emergency Generator Model 3116 (Diesel Fuel Oil)	1.5 MMBtu/hr (input) 192 Bhp/140 kW (output)	--	--	--	--
44D	N/A	Caterpillar Emergency Generator Model DG100-2 (Natural Gas)	MMBtu/hr (input) 156 Bhp/100 kW (output)	--	--	--	--
63	N/A	Cummins Emergency Fire Pump Engine Model V-504-F2 (Diesel Fuel Oil)	1.1 MMBtu/hr (input) 157 Bhp (output)	--	--	--	--

Process Equipment

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description*	PCD ID	Pollutant Controlled	Applicable Permit Date
01	D01	Dye Line 1	45,000 ft^2/hr	--	--	--	--
03	D03	Dye Line 3	55,000 ft^2/hr	--	--	--	--
04	D04	Dye Line 4	78,000 ft^2/hr	--	--	--	--
07	D07a & D07b	Dye Line 7	74,000 ft^2/hr	CPFilms Custom-Design Ethylene Glycol Recovery System w/ Precooler and Mist Eliminator. Bionomics ScubPac Proclean 15,000 Packed-Bed Scrubber	07A & 07B	VOC & HAP	10/15/04
24	24	Faustel/Inta-Roto Coating/Laminating Machine.	90,000 ft^2/hr	MegTec RTO CS-300	08	VOC & HAP	1/14/22
26	26	Faustel Coating/Laminating Machine	90,000 ft^2/hr	MegTec RTO CS-300	08	VOC & HAP	1/14/22
27	27	Faustel UV Coating Machine	90,000 ft^2/hr	Regenerative Thermal Oxidizer	10	VOC & HAP	1/14/22
28	28	Faustel Coating/Laminating Machine	90,000 ft^2/hr	Regenerative Thermal Oxidizer	10	VOC & HAP	6/14/89
29	29	Faustel UV Coating /Laminating Line	90,000 ft^2/hr	TEC Grace Systems, Quantum Catalytic Incinerator	02	VOC & HAP	7/19/21

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description*	PCD ID	Pollutant Controlled	Applicable Permit Date
30	30	Faustel Silicone Coating Line	90,000 ft²/hr	Durr Systems, Inc. Cleanswitch 250-95 RTO	03	VOC & HAP	7/19/21
31	31a	Faustel Coating (UK-3) Machine	112,000 ft²/hr	--	--	--	1/14/22
32	32	Lembo Silicone Coating Line	90,000 ft²/hr	Durr Systems, Inc. Cleanswitch 250-95 RTO	04	VOC & HAP	7/19/21
33	33	SR UV Coating & Pressure-Sensitive Adhesive Coating Line (includes Faustel Coating/Laminating Machine)	111,000 ft²/hr	TEC Grace Systems, Magnum Catalytic Incinerator	05	VOC & HAP	7/19/21
34	34	SR UV Coating & Pressure-Sensitive Adhesive Coating Line (includes Faustel Coating/Laminating Machine)	111,000 ft²/hr	MegTec RTO, Enterprise	06	VOC & HAP	6/23/00
35	3509	Faustel Coating/Laminating Machine	111,000 ft²/hr	MegTec RTO, Enterprise	09	VOC & HAP	11/26/07

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

Fuel Burning Equipment Requirements – Eclipse Lookout Boiler (EU05)

Limitations

1. **Fuel Burning Equipment Requirements (EU05) - Limitations** – The approved fuel for the Eclipse Lookout boiler is natural gas. A change in the fuel may require a permit to modify and operate.
(9VAC5-80-110)

2. **Fuel Burning Equipment Requirements (EU05) – Limitations** - Visible emissions from the boiler shall not exceed 20% opacity, except for one six-minute period in any one hour in which visible emissions shall not exceed 60% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9VAC5-40-80 and 9VAC5-80-110)

3. **Fuel Burning Equipment Requirements (EU05) – Limitations** – The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

    a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance;

    b. Maintain an inventory of spare parts;

    c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum; and

    d. Train operators in the proper operation of all air pollution control equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided, including the names of trainees, the date of training and the nature of the training.

    Records of maintenance, inspections and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
    (9VAC5-40-20E and 9VAC5-80-110)

Recordkeeping

4. **Fuel Burning Equipment Requirements (EU05) – Recordkeeping** - The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:

a. The annual throughput of natural gas (in million cubic feet) for the Eclipse Lookout boiler, calculated as the sum of each consecutive twelve-month period;

b. Maintenance and training records required by Condition 3; and

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.
(9VAC5-80-110)

Testing

5. **Fuel Burning Equipment Requirements (EU05) – Testing** - The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from DEQ, test ports shall be provided at the appropriate locations.
(9VAC5-40-30 and 9VAC5-80-110)

6. **Fuel Burning Equipment Requirements (EU05) - Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9VAC5-80-110)

40 CFR 63 (MACT) Subpart DDDDD – NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters (EU05, EU011 & EU37)

General Compliance Requirements

7. **MACT Subpart DDDDD (EU05, EU011 & EU37) – General Compliance** - The permittee shall, at all times, operate and maintain any affected source (as defined in 40 CFR 63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to DEQ that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
(9VAC5-80-110 and 40 CFR 63.7500(a) (3))

8. **MACT Subpart DDDDD (EU05, EU011 & EU37)** – **Limitations** - General Compliance Requirements - The permittee shall comply with the applicable General Provisions as specified in Table 10 to 40 CFR 63 Subpart DDDDD.
(9VAC5-80-110 and 40 CFR 63.7565)

9. **MACT Subpart DDDDD (EU05) – Work Practice Standards** - The permittee shall conduct an annual tune-up of the boiler while burning natural gas to demonstrate continuous compliance as specified in a through f below.

a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;

b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (permittee may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection;

d. Optimize total emissions of carbon monoxide (CO). This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxides (NO_X) requirement to which the unit is subject;

e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and

f. Maintain on-site and submit, if requested by DEQ, a report containing the following information:

    i. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;

    ii. A description of any corrective actions taken as a part of the tune-up; and

    iii. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

Each annual tune-up shall be no more than 13 months after the previous tune-up. If the unit is not operating on the required date for a tune-up, the tune-up shall be conducted within 30

calendar days of startup. If the unit has not been operated since the previous tune-up and more than one year has passed since the tune-up, the permittee shall complete a subsequent tune-up by following the procedures described in a through f above within 30 calendar days of startup.
(9VAC5-80-110, 40 CFR 63.7515(g) and 40 CFR 63.7540(a) (10) and (a) (13))

10. **MACT Subpart DDDDD (EU011 & EU37) – Work Practice Standards** – The permittee shall conduct a tune-up of the boiler or process heater every five years while the unit burns natural gas as specified in Condition 9.a through 9.f, to demonstrate continuous compliance. The burner inspection specified in Condition 9.a may be delayed until the next scheduled or unscheduled unit shutdown, but the permittee shall inspect each burner at least once every 72 months. Each five-year tune-up shall be conducted no more than 61 months after the previous tune-up.
(9VAC5-80-110, 40 CFR 63.7515(d) and 40 CFR 63.7540(a) (12))

Reporting

11. **MACT Subpart DDDDD (EU05, EU011 & EU37) – Reporting -** The permittee shall submit an annual (for EU05) and a five-year (for EU011 & EU37) compliance report as specified in a through d below.

    a. The first compliance report must cover the period beginning on January 31, 2016 and ending on December 31 within one or five years, as applicable, after January 31, 2016;

    b. The first annual or five-year compliance report must be postmarked or submitted no later than January 31;

    c. Annual and five-year compliance reports must cover the applicable one- or five-year periods from January 1 to December 31;

    d. Annual and five-year compliance reports must be postmarked or submitted no later than January 31.

    The permittee may submit the first and subsequent compliance reports according to the dates in Condition 168 instead of according to the dates in a through d above.
    (9VAC5-80-110 and 40 CFR 63.7550(b))

12. **MACT Subpart DDDDD (EU05, EU011 & EU37) – Reporting** – The compliance report required by Condition 11 shall contain the following information:

    a. Company and facility name and address;

    b. Process unit information, emissions limitations and operating parameter limitations;

    c. Date of report and beginning and ending dates of the reporting period;

d. The date of the most recent tune-up for each unit subject to only the requirement to conduct an annual or five-year tune-up according to Conditions 9 and 10 (40 CFR 63.7540(a)(10), (11), or (12)) respectively. Include the date of the most recent burner inspection if it was not done annually or on a five-year period and was delayed until the next scheduled or unscheduled unit shutdown.

e. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(9VAC5-80-110 and 40 CFR 63.7550(c))

13. **MACT Subpart DDDDD (EU05, EU011 & EU37) – Reporting** – The permittee shall submit the report required by Condition 11 electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) The permittee shall use the appropriate electronic report in CEDRI for 40 CFR 63 Subpart DDDDD. Instead of using the electronic report in CEDRI for this subpart, the permittee may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (http://www.epa.gov/ttn/chief/cedri/index.html), once the XML schema is available. If the reporting form specific to 40 CFR 63 Subpart DDDDD is not available in CEDRI at the time that the report is due, the permittee shall submit the report to the EPA at the appropriate address listed in 40 CFR 63.13 . The permittee shall begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. The permittee shall submit a copy of the report to DEQ.
(9VAC5-80-110 and 40 CFR 63.7550(h) (3))

Monitoring and Recordkeeping

14. **MACT Subpart DDDDD (EU05, EU011 & EU37) – Recordkeeping** – The permittee shall keep the following records:

a. A copy of each notification and report submitted to comply with 40 CFR 63 Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report submitted, according to the requirements 40 CFR 63.10(b)(2)(xiv); and

b. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).

Records shall be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). The permittee shall keep each record for five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The permittee shall keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least two years after the date of each

occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee may keep the records off site for the remaining three years. (9VAC5-80-110, 40 CFR 63.7555(a) and 40 CFR 63.7560)

40 CFR 60 (NSPS) Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (EU44D)

Limitations

15. **NSPS Subpart JJJJ (EU44D) – Emission Standards** – The permittee shall comply with the following emission standards for the Caterpillar Emergency Generator:

	g/HP-hr	ppmvd @ 15% O_2
NO_X	2.0	160
CO	4.0	540
VOC	1.0	86

For purposes of showing compliance with the above limits, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included. The permittee shall operate and maintain the engine to meet the above limits over the entire life of the engine.
(9VAC5-80-110, 40 CFR 60.4233(e), 40 CFR 60.4234 and Table 1 to 40 CFR 60 Subpart JJJJ)

16. **NSPS Subpart JJJJ (EU44D) – Compliance** – The permittee shall demonstrate compliance with the emissions standards in Condition 15 by purchasing an engine certified according to procedures specified in 40 CFR 60 Subpart JJJJ for the same model year and demonstrating compliance according to one of the methods specified in 40 CFR 60.42439(a).
(9VAC5-80-110 and 40 CFR 60.4243(b))

17. **NSPS Subpart JJJJ (EU44D) - Compliance -** In order for the engine to be considered emergency stationary RICE under 40 CFR 60 Subpart JJJJ, any operation other than that listed in 40 CFR 60.4243(d) is prohibited. If the permittee does not operate the engine according to the requirements in 40 CFR 60.4243(d), the engine will not be considered an emergency engine under 40 CFR 60 Subpart JJJJ and shall meet all requirements for non-emergency engines.
(9VAC5-80-110 and 40 CFR 60.4243(d))

18. **NSPS Subpart JJJJ (EU44D) – General Provisions** – The permittee shall comply with the applicable General Provisions as shown in Table 3 to 40 CFR 60 Subpart JJJJ.
(9VAC5-80-110 and 40 CFR 60.4246)

Monitoring

19. **NSPS Subpart JJJJ (EU44D) – Monitoring** – If the Caterpillar Emergency Generator does not meet the standards in Table 1 to 40 CFR 60 Subpart JJJJ applicable to non-emergency engines, the permittee shall install a non-resettable hour meter. (9VAC5-80-110 and 40 CFR 60.4237(b))

Recordkeeping

20. **NSPS Subpart JJJJ (EU44D) – Recordkeeping** – The permittee shall keep the following records for the Caterpillar Emergency Generator:

    a. All notifications submitted to comply with 40 CFR 60 Subpart JJJJ and all documentation supporting any notification.

    b. Maintenance conducted on the engine.

    c. Documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.

    d. If the engine is operating in a non-certified manner and subject to 40 CFR 60.4243(a)(2), documentation that the engine meets the emission standards.

    e. If the engine does not meet the standards applicable to non-emergency engines, the permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter.

    (9VAC5-80-110 and 40 CFR 60.4245)

Testing

21. **NSPS Subpart JJJJ (EU44D) – Compliance** – If the permittee does not operate or maintain its certified stationary SI internal combustion engine according to the manufacturer's written emission-related instructions, the permittee is required to perform initial performance testing as indicated in 40 CFR 60.4243, but the permittee is not required to conduct subsequent performance testing unless the stationary engine is rebuilt or undergoes major repair or maintenance. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a). (9VAC5-80-110 and 40 CFR 60.4243(f))

40 CFR 63 (MACT) Subpart ZZZZ – NESHAP for Reciprocal Internal Combustion Engines (RICE) (EU44A, EU44B, EU44D & EU63)

General Compliance Requirements

22. **MACT Subpart ZZZZ (EU44A, EU44B & EU63) - General Compliance** - The permittee shall be in compliance with the emission limitations, operating limitations and other requirements in 40 CFR 63 Subpart ZZZZ that apply to the source at all times. At all times the permittee shall operate and maintain the affected source in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to DEQ which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records and inspection of the source.
(9VAC5-80-110 and 40 CFR 63.6605)

Limitations

23. **MACT Subpart ZZZZ (EU44D) – Limitations –** Emergency Generator 44D shall meet the requirements of 40 CFR 63 Subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart JJJJ (*Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*). No further requirements apply to Emergency Generator 44D under 40 CFR 63 Subpart ZZZZ.
(9VAC5-80-110 and 40 CFR 63.6590(c))

24. **MACT Subpart ZZZZ (EU44B & EU63) – Limitations –** For the diesel engines (EU44B and EU63), the permittee shall meet the following requirements:

    a. Change oil and filter every 500 hours of operation or annually, whichever comes first;

    b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;

    c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

    (9VAC5-80-110, 40 CFR 63.6602 and Item 1 of Table 2c of 40 CFR 63 Subpart ZZZZ)

25. **MACT Subpart ZZZZ (EU44A, EU44B & EU63) – Limitations** – During periods of startup of each engine, the permittee shall minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to 40 CFR 63 Subpart ZZZZ apply.
(9VAC5-80-110, 40 CFR 63.6602, 40 CFR 63.6625(h) and Item 1 of Table 2c of 40 CFR 63 Subpart ZZZZ)

26. **MACT Subpart ZZZZ (EU44A) – Limitations** – For the Kohler emergency generator (EU44A), the permittee shall meet the following requirements:

    a. Change oil and filter every 500 hours of operation or annually, whichever comes first;

    b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;

    c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

    (9VAC5-80-110, 40 CFR 63.6602 and Item 6 of Table 2c of 40 CFR 63 Subpart ZZZZ)

27. **MACT Subpart ZZZZ (EU44A, EU44B & EU63) – Limitations** – The permittee has the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) and (j) in order to extend the specified oil change requirement in Conditions 24.a and 26.a.
    (9VAC5-80-110, 40 CFR 63.6625(i) and Footnote 2 to Table 2c of 40 CFR 63 Subpart ZZZZ)

28. **MACT Subpart ZZZZ (EU44A, EU44B, EU44D & EU63) - Continuous Compliance -** In order for the engines to be considered emergency stationary RICE under 40 CFR 63 Subpart ZZZZ, any operation other than that listed in 40 CFR 63.6640(f) is prohibited. If the permittee does not operate the engine according to the requirements in 40 CFR 63.6640(f), the engine will not be considered an emergency engine under 40 CFR 63 Subpart ZZZZ and shall meet all requirements for non-emergency engines.
    (9VAC5-80-110 and 40 CFR 63.6640(f))

Monitoring

29. **MACT Subpart ZZZZ (EU44A, EU44B & EU63) – Operation and Maintenance** – For each engine, the permittee shall install a non-resettable hour meter if one is not already installed.
    (9VAC5-80-110 and 40 CFR 63.6625(f))

30. **MACT Subpart ZZZZ (EU44A, EU44B & EU63) – Continuous Compliance Demonstration** – The permittee shall demonstrate continuous compliance with Conditions 24, 25, 26 and 27 by:

    a. Operating and maintaining the stationary RICE according to the manufacturer's emission-related written operation and maintenance instructions; or

b. Developing and following its own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

(9VAC5-80-110, 40 CFR 63.6625(e), 40 CFR 63.6640(a) and Item 9 in Table 6 of 40 CFR 63 Subpart ZZZZ)

Recordkeeping

31. **MACT Subpart ZZZZ (EU44A, EU44B & EU63) – Records** – For each existing stationary emergency RICE, the permittee shall keep the following records:

a. Maintenance conducted on the stationary RICE and after-treatment control device (if any) according to the permittee's own maintenance plan; and

b. Hours of operation of the engine that is recorded through the non-resettable hour meter.

Records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1). As specified in 40 CFR 63.10(b)(1), the permittee shall keep each record for five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The permittee shall keep each record readily accessible in hard copy or electronic form for at least five years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).
(9VAC5-80-110 and 40 CFR 63.6660)

Reporting

32. **MACT Subpart ZZZZ (EU44A, EU44B & EU63) - Reports** – If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Conditions 25 or 27, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. The permittee shall report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.
(9VAC5-80-110 and Footnote 2 of Table 2d of 40 CFR 63 Subpart ZZZZ)

33. **MACT Subpart ZZZZ (EU44A, EU44B & EU63) – Reports** – The permittee shall report all deviations as defined in 40 CFR 63 Subpart ZZZZ in the semiannual monitoring report required by Condition 167.
(9VAC5-80-110 and 40 CFR 63.6650(f))

Process Equipment Requirements – Dye Lines 1, 3 & 4 and Coating/Laminating Lines 24, 26 & 27 (Legacy Units) (EU01, 03, 04, 24, 26 & 27)

Limitations

34. **Process Equipment Requirements (EU01, EU03, EU04, EU24, EU26 & EU27) – Limitations** - Visible emissions from the dye lines (EU01, EU03 and EU04) and coaters/laminators (EU24, EU26 and EU27) shall not exceed 20% opacity, except for one six-minute period in any one hour of not more than 60% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). Failure to meet the requirements of this section because of presence of water vapor shall not be a violation of this section.
(9VAC5-40-80)

Monitoring

35. **Process Equipment Requirements (EU01, EU03, & EU04) – Monitoring** – At least one time per calendar week, the permittee shall observe each ethylene glycol reclaim system exhaust stack (EU01, EU03, and EU04) over a two-minute period while the process is operating to check for the presence of visible emissions, other than condensed water vapor. If any visible emissions are observed, the permittee shall:

    a. Verify that the equipment causing the visible emissions is operating according to the manufacturer's specifications or other site-specific acceptable operating conditions. If the equipment is not operating properly, the permittee shall take timely corrective action such that the dye line resumes operation with no visible emissions, or,

    b. Perform a visible emissions evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to determine if visible emissions from the exhaust stack(s) exceed 20% opacity. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed 20% opacity, the VEE shall be conducted for a total of 60 minutes. If compliance with the visible emissions limit in Condition 34 is not demonstrated by this VEE, timely corrective action shall be taken such that the line resumes operation with visible emissions of 20% or less.

    The permittee shall maintain a visual observation log for each exhaust stack to demonstrate compliance. The log shall include the date and time of the observations, name of the

observer, whether or not there were visible emissions, any VEE recordings and any necessary corrective action.

If visible emissions are observed from any ethylene glycol reclaim system stack, the permittee shall promptly commence the corrective action procedures and Method 9 testing described in this condition. Once weekly visible emission observations are completed for a six-month period without observing any visible emissions, once per month visible emissions observations may be instituted at that stack or process emissions point. After correction of any opacity problem, the permittee shall conduct weekly visible emissions observations at that stack or process emissions point for at least a six-month period before returning to a monthly schedule.
(9VAC5-80-110 E & K)

Recordkeeping

36. **Process Equipment Requirements (EU01, EU03, EU04, EU24, EU26 & EU27) -** The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:

    a. The yearly throughput of VOCs for the dye lines (EU01, EU03 and EU04) and coaters/laminators (EU24, EU26 and EU27) in tons, calculated monthly as the sum of each consecutive 12-month period.

    b. Material Safety Data Sheets (MSDS), Safety Data Sheets (SDS) or Certified Product Data Sheets (CPDS) and formulation data showing VOC content, HAP content, water content and solids content for each coating, adhesive, thinner, cleaning solution, or other materials used in each dye line (EU01, EU03 and EU04) and each coating line (EU24, EU26 and EU27). In the absence of such documentation, the permittee shall keep on site records showing VOC content of raw materials determined using 40 CFR Part 60, Appendix A Reference Method 24 or equivalent method acceptable to the DEQ; and

    c. Results of the weekly and/or monthly opacity observations and any corrective actions to reduce emissions as required in Condition 35.

    These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.
    (9VAC5-80-110 and Condition 11 of 1/14/2022 Permit Document)

Testing

37. **Process Equipment Requirements (EU01, EU03, EU04, EU24, EU26 & EU27) - Testing -** The permitted facility shall be constructed to allow for emissions testing at any

time using appropriate methods. Upon request from DEQ, test ports shall be provided at the appropriate locations.
(9VAC5-40-30 and 9VAC5-80-110)

38. **Process Equipment Requirements (EU01, EU03, EU04, EU24, EU26 & EU27) - Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by DEQ.
(9VAC5-80-110)

Process Equipment Requirements – Dye Line 7 (EU07)

Limitations

39. **Process Equipment Requirements (EU07) – Limitations** –VOC emissions from Dye Line 7 (EU07) shall be controlled by permanent total enclosure (capture efficiency of 100%), a packed-bed scrubber having a VOC removal efficiency of 90% or greater, and good operating practices. The packed-bed scrubber shall be provided with adequate access for inspection and shall be in operation when Dye Line 7 (EU07) is operating.
(9VAC5-80-110 and Condition 3 of 10/15/04 Permit Document)

40. **Process Equipment Requirements (EU07) – Limitations** – Hazardous Air Pollutant (HAP) emissions (ethylene glycol) from Dye Line 7 (EU07) shall be controlled by permanent total enclosure (capture efficiency 100%) and a solvent recovery system having an ethylene glycol recovery of 90% or greater. The ethylene glycol recovery system shall consist of enclosing the dye bath with a hood and venting the hood to a reclaim system. The reclaim system shall include a pre-cooler sufficient to condense ethylene glycol (EG) vapors. The EG vapors shall be vented through demisters to collect the condensate into a storage tank for direct reuse. The solvent recovery system shall be provided with adequate access for inspection and shall be in operation when Dye Line 7 (EU07) is operating.
(9VAC5-80-110 and Condition 4 of 10/15/04 Permit Document)

41. **Process Equipment Requirements (EU07) – Limitations** – VOCs shall not be intentionally spilled, discarded in sewers which are not connected to a treatment system, stored in open containers in an uncontrolled environment, or handled in any manner that would result in evaporation beyond that consistent with air pollution control practices for minimizing emissions.
(9VAC5-80-110 and Condition 5 of 10/15/04 Permit Document)

42. **Process Equipment Requirements (EU07) – Limitations** – The production of film through Dye Line 7 (EU07) shall not exceed 74,000 square feet per hour and 648,000,000 square feet per year. Annual production shall be calculated monthly as the sum of each consecutive 12-month period.
(9VAC5-80-110 and Condition 12 of 10/15/04 Permit Document)

43. **Process Equipment Requirements (EU07) – Limitations** – Emissions from the operation of Dye Line 7 (EU07) shall not exceed the limits specified below:

Volatile Organic Compounds	10 ppm	2.1 lbs/hr	9.0 tons/yr
Ethylene Glycol		1.9 lbs/hr	8.2 tons/yr
N-methylpyrrolidone		0.2 lbs/hr	0.8 tons/yr

Hourly emissions shall be calculated as a monthly average; annual emissions shall be calculated monthly as the sum of each consecutive 12-month period.

These emissions are derived from the estimated overall emissions contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence for exceeding of emissions limits. Compliance with these emissions limits may be determined as stated in Conditions 39 - 42 and 46 - 52.
(9VAC5-80-110 and Condition 13 of 10/15/04 Permit Document)

44. **Process Equipment Requirements (EU07) – Limitations** - Visible emissions from Dye Line 7 (EU07) shall not exceed five percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 10% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
(9VAC5-50-80, 9VAC5-80-110 and Condition 15 of 10/15/04 Permit Document)

45. **Process Equipment Requirements (EU07) – Limitations** – Upon request of the DEQ, Dye Line 7 (EU07), shall shutdown immediately if its emissions increase in any amount because of a bypass, malfunction, shutdown or failure of the process or its associated air pollution control equipment. Dye Line 7 (EU07) shall not return to operation until it and the associated air pollution control equipment are able to operate in the proper manner.
(9VAC5-80-110 and Condition 26 of 10/15/04 Permit Document)

Monitoring

46. **Process Equipment Requirements (EU07) – Monitoring** – The permanent total enclosure used to control VOC and HAP emissions from Dye Line 7 (EU07) shall be equipped with a room pressure monitor to continuously measure the room negative pressure. The monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The monitoring device shall be provided with adequate access for inspection and shall be in operation when Dye Line 7 (EU07) is operating.
(9VAC5-80-110 and Condition 6 of 10/15/04 Permit Document)

47. **Process Equipment Requirements (EU07) – Monitoring** – The room pressure monitor used to continuously measure the room negative pressure shall be observed by the permittee with a frequency not less than once per day or more frequently as sufficient to ensure good performance of the permanent total enclosure. The permittee shall keep a log of observations of the room pressure monitor.
(9VAC5-80-110 and Condition 9 of 10/15/04 Permit Document)

48. **Process Equipment Requirements (EU07) – Monitoring** – The packed bed scrubber used to control VOC and HAP emissions from Dye Line 7 (EU07) shall be equipped with a device to continuously measure and record the scrubber liquid flow rate or the scrubber refresh flow rate. The monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The monitoring device shall be provided with adequate access for inspection and shall be in operation when the packed bed scrubber is operating.
(9VAC5-80-110 and Condition 7 of 10/15/04 Permit Document)

49. **Process Equipment Requirements (EU07) – Monitoring** – The flow rate meter used to measure the packed-bed scrubber liquid flow rate or the scrubber refresh flow rate shall be installed, maintained, calibrated and operated in accordance with the manufacturer's specifications. The flow rate shall be observed by the permittee with a frequency not less than once per day or more frequently as sufficient to ensure good performance of the packed-bed scrubber. The permittee shall keep a log of observations of the flow rate meter.
(9VAC5-80-110 and Condition 11 of 10/15/04 Permit Document)

50. **Process Equipment Requirements (EU07) – Monitoring** – The EG recovery system used to reclaim EG shall be equipped with a device to continuously measure and record the temperature from the exhaust of the pre-cooler, using a thermocouple and temperature chart recorder or equivalent as approved by DEQ. The pre-cooler shall be operated at a temperature of 100ºF ±10ºF or ±10ºF of the baseline temperature as determined during the initial compliance test. The monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The pre-cooler exhaust temperature shall be observed by the permittee with a frequency not less than once per day or more frequently as sufficient to ensure good performance of the EG recovery system. The permittee shall keep a log of observations of the pre-cooler exhaust temperature. The monitoring device shall be provided with adequate access for inspection and shall be in operation when the EG recovery system is operating.
(9VAC5-80-110 and Conditions 8 and 10 of 10/15/04 Permit Document)

51. **Process Equipment Requirements (EU07) – Monitoring** - The EG recovery system shall be equipped with a device to continuously measure the pressure drop across the Brinks demister. The monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The monitoring device shall be

provided with adequate access for inspection and shall be in operation when the EG recovery system is operating.
(9VAC5-80-110 and Condition 8 of 10/15/04 Permit Document)

52. **Process Equipment Requirements (EU07) – Monitoring** - To ensure good performance, the monitoring device used to continuously measure the pressure drop across each Brinks demister shall be observed by the permittee with a frequency of not less than once per day each day that Dye Line 7 (EU07) operated. The permittee shall keep a log of the pressure drop observations from the EG recovery system.
(9VAC5-80-110 and Condition 10 of 10/15/04 Permit Document)

53. **Process Equipment Requirements (EU07) – Monitoring** – The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

    a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance and maintain an inventory of spare parts;

    b. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum; and

    c. Train operators in the proper operation of all air pollution control equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided, including the names of trainees, the date of training and the nature of the training.

    Records of maintenance, inspections and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
    (9VAC5-80-110 and Condition 28 of 10/15/04 Permit Document)

54. **Process Equipment Requirements (EU07)- Compliance Assurance Monitoring (CAM)** - The permittee shall monitor, operate, calibrate and maintain the control devices controlling Dye Line 7 (EU07) according to the following:

Indicators	**1: Permanent Total Enclosure - Room Negative Pressure**	**2: Pre-Cooler Exhaust Temperature**	**3: Pressure Drop Across Demister**	**4: Scrubber Liquid Flow Rate**
Measurement Approach	Differential pressure gauge (i.e., room pressure monitor)	Thermocouple	Differential pressure gauge	Liquid flow meter
Indicator Range	Pressure drop reading ≥ -0.007 inches water as a 3-hour rolling average. An excursion is defined as a 3-hour average pressure differential reading of less than -0.007 inches water (-0.006 inches of water or less).	≤100 °F, ±10 °F, as a 3-hr rolling average. An excursion is defined as a 3-hr reading of ≥110 °F.	≥3.0 inches water and ≤10.0 inches water. An excursion is defined as a 3-hr reading outside of the required pressure drop range.	>140 and <210 gallons per minute as a 3-hr rolling average. An excursion is defined as a 3-hr flow reading outside the required liquid flow rate
QIP Threshold	5% of operating hours during the 6-month reporting period (e.g., for 2,000 operating hours, 100 3-hr readings with negative pressure less than the excursion threshold).	5% of operating hours during the 6-month reporting period (e.g., for 2,000 operating hours, 100 3-hr readings with temperature above the excursion threshold)	5% of operating hours during the 6-month reporting period (e.g., for 100 days of pressure readings, 5 readings outside indicator range)	5% of operating hours during the 6-month reporting period (e.g., for 100 days of pressure readings, 5 readings outside indicator range).
Performance Criteria: Data Representativeness	Pressure lines: One inside room enclosure, second outside room enclosure to monitor negative pressure inside enclosure as indicator of capture system performance. Pressure gauge: 0.001 inches water resolution	Thermocouple located in the exhaust from pre-cooler as indicator of cooler performance. Thermocouple accuracy: ±5°F	Pressure differential measured across inlet and outlet of demister as indicator of demister removal performance. Pressure reading accuracy: ±1%	Flow rate sensor located in scrubber recirculation line as indicator of scrubber performance. Flow rate measurement accuracy: ±5%
Performance Criteria: Verification of Operational Status	Pressure drop ≥-0.007 inches of water across the room	Temperature ≤100°F	Pressure drop across the demister between 3.0 and 10.0 inches of water	Liquid flow rate between 140 and 210 gpm through the scrubber

Indicators	1: Permanent Total Enclosure - Room Negative Pressure	2: Pre-Cooler Exhaust Temperature	3: Pressure Drop Across Demister	4: Scrubber Liquid Flow Rate
Performance Criteria: QA/QC Practices and Criteria	Factory calibrated. Annual calibration in accordance with manufacturer's recommendations.	Factory calibrated. Annual calibration in accordance with manufacturer's recommendations	Factory calibrated. Annual calibration in accordance with manufacturer's recommendations	Factory calibrated. Annual calibration in accordance with manufacturer's recommendations
Performance Criteria: Monitoring Frequency	Continuous	Continuous	Continuous	Continuous
Data Collection Procedures	Continuous data compiled and recorded as 3-hr rolling averages.	Continuous data compiled and recorded as 3-hr rolling averages	Continuous data compiled and recorded as 3-hr rolling averages	Continuous data compiled and recorded as 3-hr rolling averages

(9VAC5-80-110 and 40 CFR 64.6(c))

55. **Process Equipment Requirements (EU07) - CAM** - The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9. (9VAC5-80-110 and 40 CFR 64.6 (c))

56. **Process Equipment Requirements (EU07) – CAM** - At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
(9VAC5-80-110 and 40 CFR 64.7 (b))

57. **Process Equipment Requirements (EU07) – CAM** - Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that Dye Line 7 (EU07) is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.
(9VAC5-80-110 and 40 CFR 64.7 (c))

58. **Process Equipment Requirements (EU07) – CAM** - Upon detecting an excursion or exceedance, the permittee shall restore operation of Dye Line 7 (EU07) (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.
(9VAC5-80-110 and 40 CFR 64.7 (d)(1))

59. **Process Equipment Requirements (EU07) – CAM** - Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
(9VAC5-80-110 and 40 CFR 64.7(d) (2))

60. **Process Equipment Requirements (EU07) – CAM** - If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Blue Ridge Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
(9VAC5-80-110 and 40 CFR 64.7(e))

61. **Process Equipment Requirements (EU07) – CAM** - If the number of exceedances or excursions exceeds the QIP Threshold stated in Condition 54, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:

    a. Improved preventative maintenance practices;

    b. Process operation changes;

    c. Appropriate improvements to control methods;

    d. Other steps appropriate to correct control performance; and

    e. More frequent or improved monitoring.

    (9VAC5-80-110 and 40 CFR 64.8(a) and (b))

Recordkeeping

62. **Process Equipment Requirements (EU07) – Recordkeeping** - The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:

    a. Emissions calculations for VOCs from Dye Line 7 (EU07) using calculation methods approved by DEQ, to verify compliance with the emissions limitations in Condition 43. Hourly emissions shall be calculated monthly as a monthly average and annual emissions shall be calculated monthly as the sum of each consecutive 12-month period;

b. The mass emissions rates for VOCs, Ethylene Glycol and N-methylpyrrolidone as a function of production (e.g. lbs/square foot film processed) as determined from the most recent performance test using a calculation method approved with the test protocol by the Blue Ridge Regional Office;

c. Operation and control device monitoring records for the permanent total enclosure (room negative pressure), packed-bed scrubber (flow rate), and EG recovery system (pre-cooler exhaust temperature and demister pressure drop) as required in Conditions 47, 49, 50 and 52. The operating parameter logs shall include the date and time, name of the observer, the value of the parameter observed, and any corrective action;

d. Material Safety Data Sheets (MSDS), Safety Data Sheets (SDS) or Certified Product Data Sheets (CPDS) and formulation data showing VOC content, HAP content, water content and solids content for each coating, thinner, cleaning solution, or other materials used in Dye Line 7 (EU07). In the absence of such documentation, the permittee shall keep on site records showing VOC content of raw materials determined using 40 CFR Part 60, Appendix A Reference Method 24 or equivalent method acceptable to DEQ;

e. Monthly and annual emissions (in pounds or tons) of each HAP. Hourly emissions shall be calculated monthly as a monthly average. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period;

f. Control efficiencies of the wet scrubber and the ethylene glycol recovery system, as determined by the most recent performance test using a calculation method approved with the test protocol by the Blue Ridge Regional Office;

g. Scheduled and unscheduled maintenance and operator training as required in Condition 53.

h. Monthly and annual operating hours of Dye Line 7 (EU07), calculated monthly as the sum of each consecutive 12-month period;

i. Annual production of film processed on Dye Line 7 (EU07) in square feet or equivalent, calculated monthly as the sum of each consecutive 12-month period;

j. Results of all performance tests;

k. CAM Recordkeeping - The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan (QIP) required pursuant to 40 CFR 64.8 and Condition 61 and any activities undertaken to implement a QIP, and other supporting information required to be maintained under 40 CFR 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.
(9VAC5-80 110, 40 CFR 64.9(b) and Condition 21of 10/15/04 Permit Document)

Testing

63. **Process Equipment Requirements (EU07) – Testing -** Performance tests shall be conducted on the Permanent Total Enclosure used to control VOC and HAP emissions from Dye Line 7 (EU07) using EPA Reference Method 204 (40 CFR 51, Appendix M) to determine compliance with the capture efficiency requirements in Conditions 39 and 40. The tests shall be performed and demonstrate compliance within two years after the effective date of this permit. Tests shall be conducted and reported and data reduced as set forth in 9VAC5-50-30 and 9VAC5-60-30 and the test methods and procedures contained in each applicable section or subpart listed in 9VAC5-50-410 and 9VAC5-60-70. The performance test shall include a test method performance audit (PA), where applicable. The details of the tests are to be arranged with the Blue Ridge Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the Blue Ridge Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit. (9VAC5-80-110)

64. **Process Equipment Requirements (EU07) – Testing -** Performance tests shall be conducted for VOC and ethylene glycol from the Dye Line 7 (EU07) reclaim stack and scrubber stack using EPA Reference Method 18 (40 CFR 60, Appendix A), or other method as approved by DEQ, to determine compliance with the emissions limits in Condition 43. The tests shall also determine the emission rate as a function of the production rate as mass of emissions per film area dyed (e.g., pounds/square foot). A determination that the total ethylene glycol concentration exiting the reclaim and scrubber stacks is no greater than 10 ppmv and that the PTE provides 100% capture based on the performance test required by Condition 63 shall satisfy the control efficiency requirements for ethylene glycol in Condition 40. The tests shall be performed and demonstrate compliance within two years after the effective date of this permit. Tests shall be conducted and reported and data reduced as set forth in 9VAC5-50-30 and 9VAC5-60-30 and the test methods and procedures contained in each applicable section or subpart listed in 9VAC5-50-410 and 9VAC5-60-70. The performance test shall include a test method performance audit (PA), where applicable. The details of the tests are to be arranged with the Blue Ridge Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the Blue Ridge Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit. (9VAC5-80-110)

65. **Process Equipment Requirements (EU07) - Testing** – Upon request by DEQ, the permittee shall conduct additional performance tests of Dye Line 7 (EU07) to demonstrate compliance with the emission limits and control efficiency requirements in the permit. The details of the test shall be arranged with DEQ.
(9VAC5-80-110 and Condition 19 of 10/15/04 Permit Document)

66. **Process Equipment Requirements (EU07) - Testing** – Upon request by DEQ, the permittee shall conduct additional visible emissions evaluations of Dye Line 7 (EU07) to demonstrate compliance with the visible emissions limits in the permit. The details of the test shall be arranged with DEQ.
(9VAC5-80-110 and Condition 20 of 10/15/04 Permit Document)

67. **Process Equipment Requirements (EU07) - Testing** - The permitted facility shall be constructed to allow for emissions testing at any time using appropriate methods. Upon request from DEQ, test ports shall be provided at the appropriate locations.
(9VAC5-50-30, 9VAC5-80-110 and Condition 22 of 10/15/04 Permit Document)

68. **Process Equipment Requirements (EU07) – Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by DEQ.
(9VAC5-80-110)

Reporting

69. **Process Equipment Requirements (EU07) – CAM Reporting** - The permittee shall submit CAM reports as part of the Title V semi-annual monitoring reports required by General Condition 167 of this permit to DEQ. Such reports shall include at a minimum:

    a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

    b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

    c. A description of the actions taken to implement a quality improvement plan (QIP) during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

    (9VAC5-80-110 F and 40 CFR 64.9(a))

Process Equipment Requirements – Coater/Laminator (EU28)

Limitations

70. **Process Equipment Requirements (EU28) - Limitations** –Total VOC emissions from the Coater/Laminator (EU28) shall be controlled by a regenerative (technically, recuperative) thermal oxidizer (RTO). The RTO shall maintain the minimum temperature that was determined during the most recent performance test that showed compliance. The RTO shall be provided with adequate access for inspection.
(9VAC5-80-110 and Condition 5 of 6/14/89 Permit Document)

71. **Process Equipment Requirements (EU28) - Limitations**– The annual production of coated polyester film on the Coater/Laminator (EU28) shall not exceed 190 million square feet, calculated as the sum of each consecutive 12-month period.
(9VAC5-80-110 and Condition 3 of 6/14/89 Permit Document)

72. **Process Equipment Requirements (EU28) - Limitations** – Emissions from the operation of the Coater/Laminator (EU28) shall not exceed the limits specified below:

Volatile Organic Compounds	11.2 lbs/hr 33.6 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 70, 71 and 74.
(9VAC5-80-110 and Condition 4 of 6/14/89 Permit Document)

73. **Process Equipment Requirements (EU28) - Limitations** - Visible emissions from the Coater/Laminator (EU28) shall not exceed 20% opacity, except for one six-minute period in any one hour of not more than 30% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9VAC5-50-80 and 9VAC5-80-110)

Monitoring

74. **Process Equipment Requirements (EU28) – Monitoring** – The RTO controlling the Coater/Laminator (EU28) shall be equipped with a device to continuously measure and record the combustion chamber temperature. The device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The monitoring device shall be provided with adequate access for inspection and shall be in operation when the RTO is operating.
(9VAC5-80-110)

75. **Process Equipment Requirements (EU28) – Monitoring -** The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

    a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance;

    b. Maintain an inventory of spare parts;

    c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum; and

    d. Train operators in the proper operation of all air pollution control equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

    Records of maintenance, inspections and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
    (9VAC5-80-110 and Condition 7 of 6/14/89 Permit Document)

Recordkeeping

76. **Process Equipment Requirements (EU28) – Recordkeeping -** The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:

    a. Annual production (in million square feet) of coated polyester film, calculated monthly as the sum of each consecutive twelve-month period;

    b. Annual throughput and emissions of VOCs (in tons), calculated monthly as the sum of each consecutive twelve-month period;

    c. Material Safety Data Sheets (MSDS), Safety Data Sheets (SDS) or Certified Product Data Sheets (CPDS) and formulation data showing VOC content, HAP content, water content and solids content for each coating, adhesive, thinner, cleaning solution or other material used in the Coater Laminator (EU28). In the absence of such documentation, the permittee shall keep onsite records showing VOC content of raw materials determined using 40 CFR Part 60, Appendix A Reference Method 24 or equivalent method acceptable to DEQ;

    d. Operation and control device monitoring records for the RTO as required by Condition 74;

e. Maintenance and training records required by Condition 75.

These records shall be available on site for inspection by DEQ and shall be current for the most recent five years.
(9VAC5-80-110 and Condition 9 of 6/14/89 Permit Document)

Testing

77. **Process Equipment Requirements (EU28) – Testing** - The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from DEQ, test ports shall be provided at the appropriate locations.
(9VAC5-50-30 and 9VAC5-80-110)

78. **Process Equipment Requirements (EU28) – Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by DEQ.
(9VAC5-80-110)

Process Equipment Requirements – UV Coater/Laminator Line (EU29), Silicone Coating Line (EU30), Lembo Silicone Coating Line (EU32) and SR UV Coater and Pressure-Sensitive Adhesive Coating Line (EU33)

Limitations

79. **Process Equipment Requirements (EU29) – Limitations -** Volatile organic compound (VOC) emissions from the UV Coater/Laminator Line (EU29) shall be controlled by a catalytic incinerator. The overall (capture and destruction) control efficiency shall be 95 percent or greater as measured by testing. The catalytic incinerator shall maintain a minimum combustion zone temperature of 600ºF or the minimum temperature that was determined during the most recent performance test that demonstrated at least 95% overall VOC control. The catalytic incinerator shall be provided with adequate access for inspection and shall be in operation when the UV Coater/Laminator Line (EU29) is operating.
(9VAC5-80-110 and Condition 1 of 7/19/21 Permit Document)

80. **Process Equipment Requirements (EU30 & EU32) – Limitations -** VOC emissions from the Silicone Coating Lines (EU30 and EU32) shall be controlled by a Regenerative Thermal Oxidizer (RTO). The overall (capture and destruction) VOC control efficiency shall be 95% or greater as measured by testing. The incinerator shall maintain a minimum temperature of 1400º F or the minimum temperature that was determined during the most recent performance test that demonstrated at least 95% overall VOC control. The

incinerator shall be provided with adequate access for inspection and shall be in operation when the Silicone Coating Lines (EU30 and EU32) are operating.
(9VAC5-80-110 and Condition 2 of 7/19/21 Permit Document)

81. **Process Equipment Requirements (EU33) – Limitations** - VOC emissions from the SR UV Coating and Pressure-Sensitive Adhesive Line (M33) shall be controlled by a catalytic incinerator. The overall (capture and destruction) control efficiency shall be 95 percent or greater as measured by testing. The catalytic incinerator shall be provided with adequate access for inspection.
(9VAC5-80-110 and Condition 3 of 7/19/21 Permit Document)

82. **Process Equipment Requirements (EU33) – Limitations** - The catalytic incinerator controlling emissions from EU33 shall maintain a minimum combustion zone temperature of 600º F. The permittee shall maintain records of the manufacturer's recommendations for catalytic bed replacement and records of actual catalyst bed replacement.
(9VAC5-80-110 and Condition 4 of 7/19/21 Permit Document)

83. **Process Equipment Requirements (EU29, EU30, EU32 & EU33) – Limitations -** At all times the disposal of VOCs shall be accomplished by taking measures, to the extent practicable, consistent with air pollution control practices for minimizing emissions. VOCs shall not be intentionally spilled, stored in open containers, or handled in any other manner that would result in evaporation beyond that consistent with air pollution practices for minimizing emissions.
(9VAC5-80-110 and Condition 8 of 7/19/21 Permit Document)

84. **Process Equipment Requirements (EU29) – Limitations -** The throughput of VOC through the UV coater/laminator line (EU29) shall not exceed 368 tons per year, calculated monthly as the sum of each consecutive 12-month period.
(9VAC5-80-110 and Condition 10 of 7/19/21 Permit Document)

85. **Process Equipment Requirements (EU30 & EU32) – Limitations -** The combined throughput of VOC through the Silicone Coating Lines (EU30 and EU32) shall not exceed 452 tons per year, calculated monthly as the sum of each consecutive 12-month period.
(9VAC5-80-110 and Condition 11 of 7/19/21 Permit Document)

86. **Process Equipment Requirements (EU29, EU30, EU32 & EU33) – Limitations -** The approved fuel for the incinerators (RTO and catalytic incinerators) is natural gas. A change in the fuel may require a permit to modify and operate.
(9VAC5-80-110 and Condition 12 of 7/19/21 Permit Document)

87. **Process Equipment Requirements (EU29) – Limitations -** Emissions from the operation of the UV Coater/Laminator Line (EU29) shall not exceed the limits specified below:

Volatile Organic Compounds	12.6 lbs/hr	18.4 tons/yr

These emissions are derived from the estimated overall emission contribution from the operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition 84.
(9VAC5-80-110 and Condition 13 of 7/19/21 Permit Document)

88. **Process Equipment Requirements (EU30 & EU32) – Limitations -** Combined emissions from the operation of the Silicone Coating Lines (EU30 and EU32) shall not exceed the limits specified below:

Volatile Organic Compounds	7.6 lbs/hr	22.6 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition 85.
(9VAC5-80-110 and Condition 14 of 7/19/21 Permit Document)

89. **Process Equipment Requirements (EU33) – Limitations** - Emissions from the operation of the SR Coating and Pressure-Sensitive Adhesive Line (EU33) shall not exceed the limits specified below:

Volatile Organic Compounds	51.4 lbs/hr	27.0 tons/yr
Acrylic Acid	0.6 lbs/hr	0.5 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 81, 82 and 94.
(9VAC5-80-110 and Condition 15 of 7/19/21 Permit Document)

90. **Process Equipment Requirements (EU29, EU30, EU32 & EU33) – Limitations -** Visible emissions from each incinerator (EU29, EU30/EU32, and EU33) shall not exceed five percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9VAC5-80-110 and Condition 16 of 7/19/21 Permit Document)

91. **Process Equipment Requirements (EU29, EU30, EU32 & EU33) – Limitations** - At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions. The permittee shall take the following measures in

order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance;

b. Maintain an inventory of spare parts;

c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum; and

d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
(9VAC5-80-110 and Condition 28 of 7/19/21 Permit Document)

Monitoring

92. **Process Equipment Requirements (EU29) – Monitoring -** The catalytic incinerator controlling EU29 shall be equipped with temperature monitoring devices to continuously measure and record the temperature difference across the catalyst bed (at the catalytic incinerator inlet and outlet). As an alternative to monitoring the temperature difference across the catalyst bed, the permittee may monitor the temperature at the inlet to the catalyst bed and implement a site-specific inspection and maintenance plan for the catalytic oxidizer as specified in paragraph 40 CFR Part 63.3360 (e)(3)(ii)(D). Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the UV Coater/Laminator Line (EU29) is operating.
(9VAC5-80-110 and Condition 5 of 7/19/21 Permit Document)

93. **Process Equipment Requirements (EU30 & EU32) – Monitoring -** The RTO controlling EU30 and EU32 shall be equipped with a device to continuously measure and record the combustion chamber temperature. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when either coating lines is operating.
(9VAC5-80-110 and Condition 6 of 7/19/21 Permit Document)

94. **Process Equipment Requirements (EU33) – Monitoring** - Temperature monitoring devices shall be installed to continuously measure and record the temperatures at the catalytic incinerator (controlling EU33) inlet and outlet. They shall be maintained and calibrated in accordance with the manufacturer's recommendations. (9VAC5-80-110 and Condition 7 of 7/19/21 Permit Document)

Recordkeeping

95. **Process Equipment Requirements (EU29, EU30, EU32 & EU33) – Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:

    a. Annual throughput of each coating used on the UV Coater/laminator Line (EU29), calculated monthly as the sum of each consecutive 12-month period;

    b. Annual throughput and emissions of VOCs and HAPs for EU29, calculated monthly as the sum of each consecutive 12-month period. The permittee shall maintain Certified Product Data Sheets (CPDS) and formulation data showing VOC content, HAP content, water content and solids content for each coating, adhesive, thinner and cleaning solution or other materials used in the UV Coater/Laminator Line (EU29). In the absence of such documentation, VOC content of raw materials shall be determined using 40 CFR Part 60, Appendix A Reference Method 24 or equivalent method acceptable to the DEQ;

    c. Records of manufacturer's recommendations for catalyst bed replacement and records of actual catalyst bed replacement (catalytic incinerator controlling EU29);

    d. Activity test reports as required in Conditions 97 and 98;

    e. Operation and control device monitoring records for the air pollution control device as required in Conditions 92, 93 and 94;

    f. Scheduled and unscheduled maintenance and operator training as required by Condition 91;

    g. Annual throughput and emissions of VOCs for the Silicone Coating Lines (EU30 and EU32). The emissions shall be calculated monthly as the sum of each consecutive 12-month period.

    h. Annual throughput of VOCs for the SR Coating and Pressure-Sensitive Adhesive Line (EU33). The emissions shall be calculated monthly as the sum of each consecutive 12-month period; and

i. Annual acrylic acid emissions for the SR Coating and Pressure-Sensitive Adhesive Line (EU33). The emissions shall be calculated monthly as the sum of each consecutive 12-month period.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9VAC5-80-110 and Condition 23 of 7/19/21 Permit Document)

Testing

96. **Process Equipment Requirements (EU29, EU30, EU32 & EU33) – Testing -** The coating and laminating lines shall be constructed to allow for emissions testing upon reasonable notice at any time, using appropriate methods. This includes constructing the facility/equipment such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and providing a stack or duct that is free from cyclonic flow. Sampling ports shall be provided when requested and safe sampling platforms and access shall be provided.
(9VAC5-80-110 and Condition 9 of 7/19/21 Permit Document)

97. **Process Equipment Requirements (EU29) – Testing -** Activity tests shall be conducted on the catalyst (catalytic incinerator controlling EU29) for activity level in percent of VOC destruction to determine the catalyst capability of achieving 95 percent or greater VOC destruction. The tests shall be conducted on an annual basis. The details are to be arranged with the Blue Ridge Regional Office. One written copy of the test results shall be submitted to the Blue Ridge Regional Office in writing within 60 days of the date of catalyst sample collection.
(9VAC5-80-110 and Condition 18 of 7/19/21 Permit Document)

98. **Process Equipment Requirements (EU33) – Testing -** Activity tests shall be conducted on the catalyst (catalytic incinerator controlling EU33) for activity level in percent of VOC destruction to determine the catalyst capability of achieving 95 percent or greater VOC destruction. The initial test shall be conducted after one year's operation, but no later than 15 months after startup. After initial test, the tests shall be conducted on an annual basis. The details of the tests are to be arranged with the Blue Ridge Regional Office. One written copy of the test results shall be submitted to the Blue Ridge Regional Office in writing within 60 days of the date of catalyst sample collection.
(9VAC5-80-110 and Condition 19 of 7/19/21 Permit Document)

99. **Process Equipment Requirements (EU29, EU30, EU32 & EU33) – Testing -** All continuous monitoring systems shall be installed and operational prior to conducting initial performance tests. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device.
(9VAC5-80-110 and Condition 20 of 7/19/21 Permit Document)

100. **Process Equipment Requirements (EU30 & EU32) – Testing -** Initial performance tests shall be conducted for VOC from the RTO controlling EU30 and EU32 to determine compliance with the control efficiency requirement contained in Condition 80. The tests shall be performed within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the RTO. Tests shall be conducted and reported and data reduced as set forth in 9VAC5-50-30, and the test methods and procedures contained in each applicable section or subpart listed in 9VAC5-50-410. The details of the tests are to be arranged with the Blue Ridge Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. A copy of the test results shall be submitted to the Blue Ridge Regional Office within 60 days after test completion or of start-up of the RTO and shall conform to the test report format enclosed with this permit.
(9VAC5-80-110 and Condition 21 of 7/19/21 Permit Document)

101. **Process Equipment Requirements (EU30 & EU32) – Testing -** Concurrently with the initial performance tests, Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall be conducted on the RTO controlling EU30 and EU32. Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six-minute average. The details of the tests are to be arranged with the Blue Ridge Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. The evaluation shall be performed and reported within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the RTO. A copy of the test results shall be submitted to the Blue Ridge Regional Office within 60 days after test completion or of start-up of the RTO and shall conform to the test report format enclosed with this permit.
(9VAC5-80-110 and Condition 22 of 7/19/21 Permit Document)

102. **Process Equipment Requirements (EU28) – Testing** - The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from DEQ, test ports shall be provided at the appropriate locations.
(9VAC5-50-30 and 9VAC5-80-110)

103. **Process Equipment Requirements (EU32 & EU33) – Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by DEQ.
(9VAC5-80-110)

Reporting

104. **Process Equipment Requirements (EU30 & EU32) – Reporting -** The permittee shall furnish written notification to the Blue Ridge Regional Office of the anticipated date of performance tests of the RTO controlling silicone coating lines (EU30 and EU32) postmarked at least 30 days prior to such date.
(9VAC5-80-110 and Condition 24 of 7/19/21 Permit Document)

Process Equipment Requirements – Coating Line 31 (EU31)

Limitations

105. **Process Equipment Requirements (EU31) - Limitations** –VOC emissions from Coating Line 31 (EU31) shall be controlled by the use of waterborne coatings. For the purposes of this permit, a waterborne coating is defined as a coating the volatile portion of which consists of 75 percent or more by volume of water and 25 percent or less by volume of volatile organic compounds. The coating line shall be provided with adequate access for inspection.
(9VAC5-80-110 and Condition 3 of 1/14/22 Permit Document)

106. **Process Equipment Requirements (EU31) – Limitations** – The approved fuel for the Coating Line 31 (EU31) dryer sections is natural gas. A change in the fuel shall be considered a change in the method of operation of the coating line and may require a new or amended permit.
(9VAC5-80-110 and Condition 4 of 1/14/22 Permit Document)

107. **Process Equipment Requirements (EU31) - Limitations** – The annual throughput of coating for Coating Line 31 (EU31) shall not exceed 39.1 tons per year of VOCs, calculated monthly as the sum of each consecutive 12-month period.
(9VAC5-80-110 and Condition 6 of 1/14/22 Permit Document)

108. **Process Equipment Requirements (EU31) – Limitations** – Emissions from the operation of Coating Line 31 (EU31) shall not exceed the limits specified below:

Nitrogen Oxides (as NO_2)	1.36 lbs/hr	5.96 tons/yr
Carbon Monoxide	2.76 lbs/hr	12.09 tons/yr
Volatile Organic Compounds	29.97 lbs/hr	39.10 tons/yr
Isopropyl Alcohol	28.80 lbs/hr	37.44 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 105, 106 and 107.
(9VAC5-80-110 and Condition 8 of 1/14/22 Permit Document)

109. **Process Equipment Requirements (EU31) – Limitations** - Visible emissions from Coating Line 31 (EU31) shall not exceed 5% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9VAC5-50-80, 9VAC5-80-110 and Condition 9 of 1/14/22 Permit Document)

Monitoring

110. **Process Equipment Requirements (EU31) - Monitoring** – In order to minimize the duration and frequency of excess emissions due to malfunctions of process equipment, the permittee shall develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance. These records shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request. (9VAC5-80-110 and Condition 14 of 1/14/22 Permit Document)

Recordkeeping

111. **Process Equipment Requirements (EU31) – Recordkeeping -** The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:

    a. Daily records demonstrating that coatings applied on Coating Line 31 (EU31) meet the definition of waterborne coating in Condition 105;

    b. Monthly throughput of each coating, as applied, used on Coating Line 31 (EU31), in gallons;

    c. Monthly operating hours for Coating Line 31 (EU31);

    d. Hourly VOC and isopropyl alcohol emissions from Coating Line 31 (EU31), calculated monthly as an hourly average, based on material throughput and line operating hours;

    e. Annual throughput and emissions of VOCs and isopropyl alcohol to Coating Line 31 (EU31), calculated monthly as the sum of each consecutive 12-month period;

    f. Material Safety Data Sheets (MSDS), Safety Data Sheets (SDS) or Certified Product Data Sheets (CPDS) and formulation data showing VOC content, HAP content, water content and solids content for each coating, adhesive, thinner, cleaning solution, or other materials used on Coating Line 31 (EU31). In the absence of such documentation, the permittee shall keep onsite records showing VOC content of raw materials determined using 40 CFR 60, Appendix A Reference Method 24 or equivalent method acceptable to DEQ;

    g. Maintenance and training records required by Condition 110; and

    h. The annual throughput of natural gas (in million cubic feet) for the Coating Line 31 (EU31) dryer, calculated monthly as the sum of each consecutive 12-month period.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.
(9VAC5-80-110 and Condition 11 of 1/14/22 Permit Document)

Testing

112. **Process Equipment Requirements (EU31) - Testing** - The permitted facility shall be constructed to allow for emissions testing, using appropriate methods, upon reasonable notice at any time. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.
(9VAC5-50-30, 9VAC5-80-110 and Condition 5 of 1/14/22 Permit Document)

113. **Process Equipment Requirements (EU31) – Testing -** Visible emissions evaluations (VEE) in accordance with 40 CFR 60, Appendix A, Method 9, shall be conducted on Coating Line 31 (EU31), within six months of the effective date of this permit. The details of the tests shall be arranged with the Blue Ridge Regional Office.
(9VAC5-80-110 and Condition 7 of 1/14/22 Permit Document)

114. **Process Equipment Requirements (EU31) – Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by DEQ.
(9VAC5-80-110)

Process Equipment Requirements – SR UV Coater and Pressure-Sensitive Adhesive Coating Line (EU34)

Limitations

115. **Process Equipment Requirements (EU34) - Limitations** – VOC emissions from the SR UV Coater and Pressure-Sensitive Adhesive Coating Line (EU34) shall be controlled by a regenerative thermal oxidizer. The regenerative thermal oxidizer shall maintain a minimum temperature of 1400ºF and shall achieve a control efficiency for VOCs of no less than 95%, as measured by testing. The regenerative thermal oxidizer shall be provided with adequate access for inspection and shall be in operation when the SR UV Coater and Pressure-Sensitive Adhesive Coating Line (EU34) is operating.
(9VAC5-80-110 and Conditions 3 and 4 of 6/23/00 Permit Document)

116. **Process Equipment Requirements (EU34) - Limitations** – The approved fuel for the regenerative thermal oxidizer is natural gas. A change in the fuel may require a permit to modify and operate.
(9VAC5-80-110 and Condition 6 of 6/23/00 Permit Document)

117. **Process Equipment Requirements (EU34) - Limitations** – Emissions from the operation of the SR UV Coater and Pressure-Sensitive Adhesive Coating Line (EU34) shall not exceed the limits specified below:

Volatile Organic Compounds	57.3 lbs/hr	39.4 tons/yr
Acrylic Acid	0.5 lbs/hr	0.5 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 115, 119 and 121.
(9VAC5-80-110 and Condition 8 of 6/23/00 Permit Document)

118. **Process Equipment Requirements (EU34) - Limitations** - Visible emissions from the regenerative thermal oxidizer shall not exceed five percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
(9VAC5-50-80, 9VAC5-80-110 and Condition 9 of 6/23/00 Permit Document)

Monitoring

119. **Process Equipment Requirements (EU34) - Monitoring** – The regenerative thermal oxidizer controlling EU34 shall be equipped with a device to continuously measure and record the combustion chamber temperature. The device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The monitoring device shall be provided with adequate access for inspection and shall be in operation when the regenerative thermal oxidizer is operating.
(9VAC5-80-110 and Condition 5 of 6/23/00 Permit Document)

120. **Process Equipment Requirements (EU34) - Monitoring** – The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

    a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance and maintain an inventory of spare parts;

    b. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum; and

    c. Train operators in the proper operation of all air pollution control equipment and familiarize the operators with the written operating procedures. The permittee shall

maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance, inspections and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
(9VAC5-80-110 and Condition 17 of 6/23/00 Permit Document)

Recordkeeping

121. **Process Equipment Requirements (EU34) – Recordkeeping** - The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:

a. Annual throughput and emissions of VOCs for the SR UV Coater and Pressure-Sensitive Adhesive Coating Line (EU34), calculated monthly as the sum of each consecutive 12-month period;

b. Annual acrylic acid emissions, calculated monthly as the sum of each consecutive 12-month period;

c. Monthly throughput of each coating, as applied, used on the SR UV Coater and Pressure-Sensitive Adhesive Coating Line (EU34). in gallons;

d. Monthly operating hours for the SR UV Coater and Pressure-Sensitive Adhesive Coating Line (EU34);

e. Hourly VOC and acrylic acid emissions from the SR UV Coater and Pressure-Sensitive Adhesive Coating Line (EU34), calculated monthly as an hourly average, based on material throughput and line operating hours;

f. Material Safety Data Sheets (MSDS), Safety Data Sheets (SDS) or Certified Product Data Sheets (CPDS) and formulation data showing VOC content, HAP content, water content and solids content for each coating, adhesive, thinner, cleaning solution, or other materials used in the SR UV Coater and Pressure-Sensitive Adhesive Coating Line (EU34). In the absence of such documentation, the permittee shall keep onsite records showing VOC content of raw materials determined using 40 CFR Part 60, Appendix A Reference Method 24 or equivalent method acceptable to the DEQ;

g. Operation and control device monitoring records for the regenerative thermal oxidizer as required by Condition 119;

h. Maintenance and training records required by Condition 120;

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.
(9VAC5-80-110 and Conditions 10 and 17 of 6/23/00 Permit Document)

Testing

122. **Process Equipment Requirements (EU34) - Testing** - The permitted facility shall be constructed to allow for emissions testing at any time using appropriate methods. Upon request from DEQ, test ports shall be provided at the appropriate locations.
(9VAC5-50-30, 9VAC5-80-110 and Condition 11 of 6/23/00 Permit Document)

123. **Process Equipment Requirements (EU34) – Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by DEQ.
(9VAC5-80-110)

Process Equipment Requirements – Coating/Laminating Machine (EU35)

Limitations

124. **Process Equipment Requirements (EU35) – Limitations** – VOC and HAP emissions from the surface coating line (EU35) (including emissions from cleaning) shall be captured by permanent total enclosures (capture efficiency of 100%). The permanent total enclosures shall be provided with adequate access for inspection and shall be in operation when the operations that they control are operating.
(9VAC5-80-110 and Condition 2 of 11/26/07 Permit Document)

125. **Process Equipment Requirements (EU35) – Limitations** – VOC and HAP emissions from the surface coating line (EU35) (including emissions from cleaning) shall be controlled by a regenerative thermal oxidizer (RTO). The RTO shall be provided with adequate access for inspection and shall be in operation when the operations that it controls are operating.
(9VAC5-80-110 and Condition 3 of 11/26/07 Permit Document)

126. **Process Equipment Requirements (EU35) – Limitations** – VOC and HAP emissions from mixing and cleaning operations that occur in the mixing room shall be controlled by an RTO. The RTO shall be provided with adequate access for inspection and shall be in operation when the operations that it controls are operating.
(9VAC5-80-110 and Condition 4 of 11/26/07 Permit Document)

127. **Process Equipment Requirements (EU35) – Limitations** – The RTO that controls the VOC and HAP emissions from the surface coating line (EU35) and mixing room shall maintain a control efficiency of 95% or greater. The RTO shall maintain a minimum

combustion zone temperature as determined during the most recent performance test that demonstrated 95% VOC control.
(9VAC5-80-110 and Condition 5 of 11/26/07 Permit Document)

128. **Process Equipment Requirements (EU35) – Limitations** – At all times, the disposal of VOCs shall be accomplished by taking measures, to the extent practicable, consistent with air pollution control practices for minimizing emissions. VOCs shall not be intentionally spilled, stored in open containers, or handled in any other manner that would result in evaporation beyond that consistent with air pollution practices for minimizing emissions.
(9VAC5-80-110 and Condition 6 of 11/26/07 Permit Document)

129. **Process Equipment Requirements (EU35) – Limitations** – The throughput of VOC through the surface coating line (EU35) shall not exceed 735 tons per year, calculated monthly as the sum of each consecutive 12-month period.
(9VAC5-80-110 and Condition 11 of 11/26/07 Permit Document)

130. **Process Equipment Requirements (EU35) – Limitations** – The approved fuel for the RTO is natural gas. A change in the fuel may require a permit to modify and operate.
(9VAC5-80-110 and Condition 12 of 11/26/07 Permit Document)

131. **Process Equipment Requirements (EU35) – Limitations** – Emissions from the operation of the surface coating line (EU35) shall not exceed the limits specified below.

VOC	50.3 lbs/hr	36.8 tons/yr

These emissions are derived from the estimated overall emissions contribution from the operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition 129.
(9VAC5-80-110 and Condition 14 of 11/26/07 Permit Document)

132. **Process Equipment Requirements (EU35) – Limitations** – Visible emissions from the RTO controlling emissions from the surface coating line (EU35) shall not exceed five percent opacity as determined by EPA Method 9 (40 CFR 60 Appendix A).
(9VAC5-80-110 and Condition 15 of 11/26/07 Permit Document)

Monitoring

133. **Process Equipment Requirements (EU35) – Monitoring** – Each permanent total enclosure shall be equipped with a device to continuously monitor the differential pressure. The monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with

adequate access for inspection and shall be in operation when the permanent total enclosure is operating.
(9VAC5-80-110 and Condition 7 of 11/26/07 Permit Document)

134. **Process Equipment Requirements (EU35) – Monitoring** – To ensure good performance, the monitoring device used to continuously measure the pressure differential across each permanent total enclosure shall be observed by the permittee with a frequency of not less than once per day. The permittee shall keep a log of the observations or continuously record measurements from the monitoring device.
(9VAC5-80-110 and Condition 8 of 11/26/07 Permit Document)

135. **Process Equipment Requirements (EU35) – Monitoring** – The RTO shall be equipped with devices to continuously measure and record the combustion chamber temperature. Temperature monitoring shall be at or near the combustion zone. The monitoring and recording device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring and recording device shall be provided with adequate access for inspection and shall be in operation when the RTO is operating.
(9VAC5-80-110 and Condition 9 of 11/26/07 Permit Document)

136. **Process Equipment Requirements (EU35) - Monitoring** – The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

    a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance and maintain an inventory of spare parts;

    b. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum; and

    c. Train operators in the proper operation of all air pollution control equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

    Records of maintenance, inspections and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
    (9VAC5-80-110 and Condition 28 of 11/26/07 Permit Document)

Recordkeeping

137. **Process Equipment Requirements (EU35) – Recordkeeping** - The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate

compliance with this permit. The content and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:

a. Annual throughput of VOC (in tons) through the surface coating line (EU35) (including cleaning VOC throughput), calculated monthly as the sum of each consecutive 12-month period;

b. Material Safety Data Sheets (MSDS), Safety Data Sheets (SDS) or Certified Product Data Sheets (CPDS) and formulation data showing VOC content, HAP content, water content and solids content for each coating, adhesive, thinner, cleaning solution, or other materials used in the surface coating line (EU35). In the absence of such documentation, the permittee shall keep onsite records showing VOC content of raw materials determined using 40 CFR Part 60, Appendix A Reference Method 24 or equivalent method acceptable to the DEQ;

c. Monthly emissions calculations of VOC and HAPs from the surface coating line (EU35), using calculation methods approved by DEQ;

d. Operation and control device monitoring records as required in Conditions 134 and 135;

e. Scheduled and unscheduled maintenance and operator training as required by Condition 136; and

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.
(9VAC580-110 and Condition 20 of 11/26/07 Permit Document)

Testing

138. **Process Equipment Requirements (EU35) – Testing** – The surface coating line (EU35) shall be constructed to allow for emissions testing upon reasonable notice at any time, using appropriate methods. This includes constructing the facility/equipment such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and providing a stack or duct that is free from cyclonic flow. Sampling ports shall be provided when requested and safe sampling platforms and access shall be provided.
(9VAC5-80-110 and Condition 10 of 11/26/07 Permit Document)

139. **Process Equipment Requirements (EU35) – Testing** – Upon request by DEQ, the permittee shall conduct performance tests to demonstrate compliance with the emission limits in Condition 131. The details of the test shall be arranged with the Blue Ridge Regional Office.
(9VAC5-80-110 and Condition 16 of 11/26/07 Permit Document)

140. **Process Equipment Requirements (EU35) – Testing** – Upon request by DEQ, the permittee shall conduct visible emissions evaluations to demonstrate compliance with the visible emissions limits in Condition 132. The details of the test shall be arranged with the Blue Ridge Regional Office.
(9VAC5-80-110 and Condition 17 of 11/26/07 Permit Document)

40 CFR 63 (MACT) Subpart JJJJ – NESHAP for Paper and Other Web Coating (Coating Lines – EU24, EU26 - EU35)

Limitations

141. **MACT Subpart JJJJ (EU24, EU26, EU27, EU28, EU29, EU30, EU31, EU32, EU33, EU34 & EU35) – Emission Standards** – The permittee shall limit organic HAP emissions to the level specified in a through d below for all periods of operation, including startup, shutdown and malfunction (SSM):

    a. No more than 5 percent of the organic HAP applied for each month (95 percent reduction); or

    b. No more than 4 percent of the mass of coating materials applied for each month; or

    c. No more than 20 percent of the mass of coating solids applied for each month.

    d. If an oxidizer is used to control organic HAP emissions, the permittee shall operate the oxidizer such that an outlet organic HAP concentration of no greater than 20 parts per million by volume (ppmv) on a dry basis is achieved and the efficiency of the capture system is 100 percent.

    (9VAC5-80-110 and 40 CFR 63.3320(b))

142. **MACT Subpart JJJJ (EU24, EU26, EU27, EU28, EU29, EU30, EU31, EU32, EU33, EU34 & EU35) – Compliance Requirements** – The permittee shall demonstrate compliance each month with the emission limitations in Condition 141 by following the procedures in 40 CFR 63.3370. For each monthly demonstration, the permittee may apply any combination of the emission limitations to each of its web coating lines individually, to each of one or more groupings of its lines (including a single grouping encompassing all lines of the affected source), or to any combination of individual and grouped lines, so long as each web coating line is included in the compliance demonstration for the month (i.e., the permittee is not required to apply the same emission limitation to each of the individual lines or groups of lines). The permittee may change the emission limitation that it applies each month to its individual or grouped lines, and it may change line groupings for its monthly compliance demonstration.
(9VAC5-80-110, 40 CFR 63.3320(c) and 40 CFR 63.3370)

143. **MACT Subpart JJJJ (EU24, EU26, EU27, EU28, EU29, EU30, EU31, EU32, EU33, EU34 & EU35) – Operating Limits**

a. For any web coating line or group of web coating lines for which the permittee uses add-on control devices to demonstrate compliance with the emission standards in Condition 141, unless the permittee uses a solvent recovery system and conducts a liquid-liquid material balance, the permittee shall meet the operating limits specified in Table 1 to 40 CFR 63 Subpart JJJJ or according to paragraph b below. These operating limits apply to emission capture systems and control devices used to demonstrate compliance with 40 CFR 63 Subpart JJJJ, and the permittee shall establish the operating limits during the performance test according to the requirements in 40 CFR 63.3360(e)(3). The permittee shall meet the operating limits at all times after they are established.

b. If the permittee uses an add-on control device other than those listed in Table 1 to 40 CFR 63 Subpart JJJJ or wish to monitor an alternative parameter and comply with a different operating limit, you must apply to the EPA for approval of alternative monitoring under 40 CFR 63.8(f).

(9VAC5-80-110 and 40 CFR 63.3321)

144. **MACT Subpart JJJJ (EU24, EU26, EU27, EU28, EU29, EU30, EU31, EU32, EU33, EU34 & EU35) – General Requirements** – The permittee shall always operate and maintain the affected source (the collection of all web coating lines at the facility), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to DEQ which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
(9VAC5-80-110 and 40 CFR 63.3340(b))

145. **MACT Subpart JJJJ Requirements (EU24, EU26, EU27, EU28, EU30, EU31, EU32, EU33, EU34 & EU35) – Limitations -** To demonstrate compliance with the emission standards in Condition 141 when using a control device, the permittee must develop and implement a written startup, shutdown and malfunction plan according to 40 CFR 63.6(e)(3).
(9VAC5-80-110, 40 CFR 63.3340(b) and (d), and 40 CFR 63.6(e)(3))

Monitoring

146. **MACT Subpart JJJJ (EU24, EU26, EU27, EU28, EU29, EU30, EU31, EU32, EU33, EU34 & EU35) – Monitoring** – Following the date on which the initial or periodic performance test of a control device is completed to demonstrate continuing compliance with the standards, the permittee shall monitor and inspect each capture system and each control device used to comply with Condition 141. The permittee shall install and operate the monitoring equipment as specified in a and b below.

    a. *Bypass and coating use monitoring*. For web coating lines with intermittently-controlled work stations, the permittee shall monitor bypasses of the control device and the mass of each coating material applied at the work station during any such bypass. If using a control device for complying with the requirements of 40 CFR 63 Subpart JJJJ, the permittee shall demonstrate that any coating material applied on a never-controlled work station or an intermittently-controlled work station operated in bypass mode is allowed in the compliance demonstration according to 40 CFR 63.3370(o) and (p). The bypass monitoring shall be conducted using at least one of the procedures in 40 CFR 63.3350 (c)(1) through (4) for each work station and associated dryer.

    b. *Capture system monitoring*. If the permittee is complying with the emission standards in Condition 141 through the use of a capture system and control device for one or more web coating lines, the permittee shall develop a site-specific monitoring plan containing the information specified in i and ii below for these capture systems. The permittee shall monitor the capture system in accordance with iii. The permittee shall make the monitoring plan available for inspection by the permitting authority upon request.

        i. The monitoring plan shall:

            (1) Identify the operating parameter to be monitored to ensure that the capture efficiency determined during the initial compliance test is maintained; and

            (2) Explain why this parameter is appropriate for demonstrating ongoing compliance; and

            (3) Identify the specific monitoring procedures.

        ii. The monitoring plan shall specify the operating parameter value or range of values that demonstrate compliance with the emission standards in Condition 141. The specified operating parameter value or range of values must represent the conditions present when the capture system is being properly operated and maintained.

iii. The permittee shall conduct all capture system monitoring in accordance with the plan.

iv. Any deviation from the operating parameter value or range of values which are monitored according to the plan will be considered a deviation from the operating limit.

v. The permittee shall review and update the capture system monitoring plan at least annually.

(9VAC5-80-110 and 40 CFR 63.3350(a), (b), (c) and (f))

147. **MACT Subpart JJJJ (EU24, EU26, EU27, EU28, EU29, EU30, EU31, EU32, EU33, EU34 & EU35) – Monitoring** - *Continuous parameter monitoring system (CPMS)*. If the permittee is using an oxidizer or a capture system to comply with the emission standards in Condition 141, the permittee shall install, operate, and maintain each CPMS used to monitor the oxidizer or the capture system according to the requirements in a through i below. The permittee shall install, operate, and maintain each CPMS specified in Condition 146.a according to paragraphs e through h below.

a. Each CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. The permittee shall have a minimum of four equally-spaced successive cycles of CPMS operation to have a valid hour of data.

b. The permittee shall have valid data from at least 90 percent of the hours when the process operated.

c. The permittee shall determine the hourly average of all recorded readings according to i and ii below.

i. To calculate a valid hourly value, the permittee shall have at least three of four equally-spaced data values from that hour from a continuous monitoring system (CMS) that is not out-of-control.

ii. Provided all of the readings recorded in accordance with Condition 137.c clearly demonstrate continuous compliance with the standard that applies to the permittee, then the permittee is not required to determine the hourly average of all recorded readings.

d. The permittee shall determine the block 3-hour average of all recorded readings for each operating period. To calculate the average for each 3-hour averaging period, the permittee shall have at least two of three of the hourly averages for that period using only average values that are based on valid data (i.e., not from out-of-control periods).

e. Except for temperature sensors, the permittee shall develop a quality control program that shall contain, at a minimum, a written protocol that describes the procedures for each of the operations in i through vi below. The permittee shall keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of 40 CFR 63 Subpart JJJJ, to be made available for inspection, upon request, by DEQ. If the performance evaluation plan is revised, the permittee shall keep previous (i.e., superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by DEQ, for a period of 5 years after each revision to the plan. For temperature sensors, the permittee shall follow the requirements in 40 CFR 63.3350(e)(10).

   i. Initial and any subsequent calibration of the continuous monitoring system (CMS);

   ii. Determination and adjustment of the calibration drift of the CMS;

   iii. Preventative maintenance of the CMS, including spare parts inventory;

   iv. Data recording, calculations, and reporting;

   v. Accuracy audit procedures, including sampling and analysis methods; and

   vi. Program of corrective action for a malfunctioning CMS.

f. The permittee shall record the results of each inspection, calibration, and validation check of the CPMS.

g. At all times, the permittee shall maintain the monitoring system in proper working order including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

h. Except for monitoring malfunctions, associated repairs, or required quality assurance or control activities (including calibration checks or required zero and span adjustments), the permittee shall conduct all monitoring at all times that the unit is operating. Data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities shall not be used for purposes of calculating the emissions concentrations and percent reductions specified in 40 CFR 63.3370. The permittee shall use all the valid data collected during all other periods in assessing compliance of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

i. Any averaging period for which the permittee does not have valid monitoring data and such data are required constitutes a deviation, and the permittee shall notify DEQ and EPA in accordance with 40 CFR63.3400(c).

j. *Oxidizer*. If the permittee is using an oxidizer to comply with the emission standards of 40 CFR 63 Subpart JJJJ, the permittee shall comply with i through vi below.

i. Install, maintain, and operate temperature monitoring equipment according to the manufacturer's specifications.

ii. For an oxidizer other than a catalytic oxidizer, install, operate, and maintain a temperature monitoring device equipped with a continuous recorder. The device must be capable of monitoring temperature with an accuracy of ±1 percent of the temperature being monitored in degrees Fahrenheit or ±1.8 degrees Fahrenheit, whichever is greater. The temperature sensor must be installed in the combustion chamber at a location in the combustion zone.

iii. For a catalytic oxidizer, install, operate, and maintain a temperature monitoring device equipped with a continuous recorder. The device must be capable of monitoring temperature with an accuracy of ±1 percent of the temperature being monitored in degrees Fahrenheit or ±1.8 degrees Fahrenheit, whichever is greater. The temperature sensor must be installed in the vent stream at the nearest feasible point to the inlet and outlet of the catalyst bed. Calculate the temperature rise across the catalyst.

iv. For temperature sensors, you must develop a quality control program that must contain, at a minimum, a written protocol that describes the procedures for verifying that the temperature sensor is operating properly using at least one of the methods in 40 CFR 63.3350(e)(10)(iv)(A), (B), (C), (D), (E), or (F). The permittee shall keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of 40 CFR 63, to be made available for inspection, upon request, by DEQ.

v. Conduct the validation checks in 40 CFR 63.3350(e)(10)(iv)(A), (B), or (C) any time the temperature sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor.

vi. At least quarterly, inspect temperature sensor components for proper connection and integrity or continuously operate an electronic monitoring system designed to notify personnel if the signal from the temperature sensor is interrupted.

(9VAC5-80-110 and 40 CFR 63.3350(e))

148. **MACT Subpart JJJJ Requirements (EU24, EU26, EU27, EU28, EU30, EU31, EU32, EU33, EU34 & EU35) – Monitoring -** If the permittee operates more than one capture

system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controlled work stations, the permittee shall calculate organic HAP emissions according to a and b below and use the calculation procedures specified in c below to convert the monitoring and other data into units of the selected control option in 40 CFR 63.3370(f) through (i). The permittee shall use the procedures specified in d below to demonstrate compliance.

a. *Oxidizers* – To demonstrate compliance through performance tests of capture efficiency and control device efficiency, continuous monitoring of capture system, and CPMS for control device operating parameters for each oxidizer used to control emissions from one or more web coating lines, the permittee shall:

    i. Monitor the operating parameter in accordance with 40 CFR 63.3350(e) to ensure control device efficiency – See Condition 147;

    ii. For each capture system delivering emissions to that oxidizer, monitor the operating parameter established in accordance with 40 CFR 63.3350(f) to ensure capture efficiency – See Condition 146; and

    iii. Determine the organic HAP emissions for those web coating lines served by each capture system delivering emissions to that oxidizer in accordance with paragraphs (l)(1)(i) through (vi) of 40 CFR 63.3370;

b. *Uncontrolled coating lines* - The source must determine the organic HAP applied on each uncontrolled web coating line using Equation 6 of 40 CFR 63.3370. The organic HAP emitted from an uncontrolled web coating line is equal to the organic HAP applied on that web coating line. (40 CFR 63.3370(o)(4))

c. Convert the information obtained under Conditions 148.a and 148.b into the units of the selected compliance option using the calculation procedures specified in 40 CFR 63.3370(o)(5)(i) through (iv).

d. The affected source is in compliance with the emission standards in Condition 141 for the month if all operating parameters required to be monitored under Condition 148.a of this section were maintained at the values established under 40 CFR 63.3350 and 40 CFR 63.3360 and one of the standards in i through iv below were met. If operating parameter deviations occurred, the affected source is in compliance with the emission standards in Condition 141 for the month if, assuming no control of emissions or by estimating the emissions using a control destruction efficiency curve for each 3-hour deviation period, one of the standards in i through iv below were met.

    i. The total mass of organic HAP emitted by the affected source based on coating solids applied is no more than 0.20 kg organic HAP per kg coating solids applied; or

ii. The total mass of organic HAP emitted by the affected source based on material applied is no more than 0.04 kg organic HAP per kg material applied; or

iii. The total mass of organic HAP emitted by the affected source during the month is less than the calculated allowable organic HAP as determined using 40 CFR 63.3370(m); or

iv. The total mass of organic HAP emitted by the affected source was not more than 5 percent of the total mass of organic HAP applied for the month. The total mass of organic HAP applied by the affected source in the month must be determined using Equation 10 of 40 CFR 3370(d).

(9VAC5-80-110 and 40 CFR 63.3370(o)(3), (o)(4), (o)(5), and (o)(6))

Testing

149. **MACT Subpart JJJJ (EU24, EU26, EU27, EU28, EU29, EU30, EU31, EU32, EU33, EU34 & EU35)** – **Compliance Dates** - The permittee shall perform a periodic emissions performance test by July 9, 2023, or within 60 months of the previous test, whichever is later, and subsequent tests no later than 60 months thereafter, as required in Condition 152. Performance testing for HAP or VOC destruction efficiency required by state agencies can be used to meet this requirement.
(9VAC5-80-110 and 40 CFR 63.3330(a)(2))

150. **MACT Subpart JJJJ (EU24, EU26, EU27, EU28, EU29, EU30, EU31, EU32, EU33, EU34 & EU35) – General Requirements** – The permittee shall conduct each performance test required by 40 CFR 63.3360 according to the requirements in 40 CFR 63.3360(e)(2) and under the following conditions unless the permittee obtains a waiver of the performance test according to the provisions in 40 CFR 63.7(h).

a. Representative coating operation operating conditions. The permittee shall conduct the performance test under representative operating conditions for the coating operation. Operations during periods of startup, shutdown, and nonoperation do not constitute representative conditions. The permittee shall not conduct performance tests during periods of malfunction. The permittee shall record the process information that is necessary to document operating conditions during the test and explain why the conditions represent normal operation. Upon request, the permittee shall make available to DEQ such records as may be necessary to determine the conditions of performance tests.

b. Representative emission capture system and add-on control device operating conditions. The permittee shall conduct the performance test when the emission capture system and add-on control device are operating at a representative flow rate, and the add-on control device is operating at a representative inlet concentration. Representative conditions exclude periods of startup and shutdown. The permittee

shall not conduct performance tests during periods of malfunction. The permittee shall record information that is necessary to document emission capture system and add-on control device operating conditions during the test and explain why the conditions represent normal operation.

(9VAC5-80-110 and 40 CFR 63.3340(c))

151. **MACT Subpart JJJJ (EU24, EU26, EU27, EU28, EU30, EU31, EU32, EU33, EU34 & EU35) – Testing** – If the permittee controls organic HAP on any individual web coating line or any group of web coating lines to demonstrate compliance with the emission limits in Condition 141 by limiting organic HAP or volatile matter content of coatings, the permittee shall determine the organic HAP or volatile matter and coating solids content of coating materials according to procedures in a and b below. If applicable, the permittee shall determine the mass of volatile matter retained in the coated web or otherwise not emitted to the atmosphere according to c below.

a. *Organic HAP content.* If the permittee determines compliance with the emission standards in Condition 141 by means other than determining the overall organic HAP control efficiency of a control device, the permittee shall determine the organic HAP mass fraction of each coating material "as-purchased" by following one of the procedures in i through iii below, and determine the organic HAP mass fraction of each coating material "as-applied" by following the procedures in iv below. If the organic HAP content values are not determined using the procedures in i through iii below, the permittee shall submit an alternative test method for determining their values for approval by EPA in accordance with 40 CFR 63.7(f). The recovery efficiency of the test method must be determined for all of the target organic HAP and a correction factor, if necessary, must be determined and applied.

i. *Method 311*. The permittee may test the coating material in accordance with Method 311 of appendix A of 40 CFR 63. The Method 311 determination may be performed by the manufacturer of the coating material and the results provided to the permittee. The organic HAP content must be calculated according to the criteria and procedures in 40 CFR 63.3360(c)(1)(i) through (iii).

ii. *Method 24*. For coatings, determine the volatile organic content as mass fraction of nonaqueous volatile matter and use it as a substitute for organic HAP using Method 24 of Appendix A-7 to 40 CFR 60. The Method 24 determination may be performed by the manufacturer of the coating and the results provided to the permittee. One of the voluntary consensus standards in 40 CFR 63.3360(c)(2)(i) through (v) may be used as an alternative to using Method 24.

iii. *Formulation data*. The permittee may use formulation data to determine the organic HAP mass fraction of a coating material. Formulation data may be provided to the permittee by the manufacturer of the material. In the event of an inconsistency between Method 311 (appendix A to 40 CFR 63) test data and a

facility's formulation data, and the Method 311 test value is higher, the Method 311 data will govern. Formulation data may be used provided that the information represents all organic HAP present at a level equal to or greater than 0.1 percent for OSHA-defined carcinogens as specified in section A.6.4 of appendix A to 29 CFR 1910.1200 and equal to or greater than 1.0 percent for other organic HAP compounds in any raw material used.

iv. *As-applied organic HAP mass fraction*. If the as-purchased coating material is applied to the web without any solvent or other material added, then the as-applied organic HAP mass fraction is equal to the as-purchased organic HAP mass fraction. Otherwise, the as-applied organic HAP mass fraction must be calculated using Equation 4 of 40 CFR 63.3370.

b. *Volatile organic and coating solids content.* If the permittee determines compliance with the emission standards in Condition 141 by means other than determining the overall organic HAP control efficiency of a control device and the permittee chooses to use the volatile organic content as a surrogate for the organic HAP content of coatings, the permittee shall determine the as-purchased volatile organic content and coating solids content of each coating material applied by following the procedures in i or ii below, and the as-applied volatile organic content and coating solids content of each coating material by following the procedures in iii below.

i. *Method 24*. The permittee may determine the volatile organic and coating solids mass fraction of each coating applied using Method 24 (Appendix A-7 to 40 CFR 60). The Method 24 determination may be performed by the manufacturer of the material and the results provided to the permittee. When using volatile organic compound content as a surrogate for HAP, the permittee may also use ASTM D3960-98, (incorporated by reference, see 40 CFR 63.14) as an alternative to Method 24. If these values cannot be determined using either of these methods, the permittee shall submit an alternative technique for determining their values for approval by EPA.

ii. *Formulation data*. The permittee may determine the volatile organic content and coating solids content of a coating material based on formulation data and may rely on volatile organic content data provided by the manufacturer of the material. In the event of any inconsistency between the formulation data and the results of Method 24 of Appendix A-7 to 40 CFR 60 and the Method 24 results are higher, the results of Method 24 will govern.

iii. *As-applied volatile organic content and coating solids content*. If the as-purchased coating material is applied to the web without any solvent or other material added, then the as-applied volatile organic content is equal to the as-purchased volatile content and the as-applied coating solids content is equal to the as-purchased coating solids content. Otherwise, the as-applied volatile organic content shall be calculated using Equation 5 to 40 CFR 63.3370(c)(4)

and the as-applied coating solids content must be calculated using Equation 6 to 40 CFR 63.3370(d).

c. *Volatile matter retained in the coated web or otherwise not emitted to the atmosphere*. The permittee may choose to take into account the mass of volatile matter retained in the coated web after curing or drying or otherwise not emitted to the atmosphere when determining compliance with the emission standards in Condition 141. If the permittee chooses this option, the permittee shall develop a site- and product-specific emission factor (EF) and determine the amount of volatile matter retained in the coated web or otherwise not emitted using Equation 3 to 40 CFR 63.3360(g)(1). The EF must be developed by conducting a performance test using an approved EPA test method, or alternative approved by EPA, by obtaining the average of a three-run test. The permittee may additionally use manufacturer's emissions test data (as long as it replicates the facility's coating formulation and operating conditions), or a mass-balance type approach using a modified Method 24 (including ASTM D5403-93 for radiation-cureable coatings). The EF should equal the proportion of the mass of volatile organics emitted to the mass of volatile organics in the coating materials evaluated. The permittee may use the EF in its compliance calculations only for periods that the work station(s) was (were) used to make the product, or a similar product, corresponding to that produced during the performance test. The permittee shall develop a separate EF for each group of different products for which the permittee chooses to utilize an EF for calculating emissions by conducting a separate performance test for that group of products. The permittee shall conduct a periodic performance test to re-establish the EF if there is a change in coating formulation, operating conditions, or other change that could reasonably be expected to increase emissions since the time of the last test that was used to establish the EF.

(9VAC5-80-110 and 40 CFR 63.3360(a), (c), (d) and (g))

152. **MACT Subpart JJJJ (EU24, EU26, EU27, EU28, EU30, EU31, EU32, EU33, EU34 & EU35) – Testing** - If the permittee controls organic HAP on any individual web coating line or any group of web coating lines to demonstrate compliance with the emission limits in Condition 141 by using a capture and control system, the permittee shall:

a. Initially, conduct a performance test for each capture and control system to determine: the destruction or removal efficiency of each control device other than solvent recovery according to i below, and the capture efficiency of each capture system according to ii below. If applicable, determine the mass of volatile matter retained in the coated web or otherwise not emitted to the atmosphere according to Condition 151.c.

i. *Control device efficiency*. If the permittee is using an add-on control device other than solvent recovery, such as an oxidizer, to comply with the emission standards in Condition 141, the permittee shall conduct a performance test to establish the destruction or removal efficiency of the control device according to the methods

and procedures in 40 CFR 63.3360(e)(1) and (2). During the performance test, you must establish the operating limits required by Condition 143 according to 40 CFR 63.3360(e)(3).

ii. *Capture efficiency*. If the permittee demonstrates compliance by meeting the requirements of 40 CFR 63.3370(f), (g), (h), (i), (j)(2), (l), (o)(2) or (3), or (q), the permittee shall determine capture efficiency using the procedures in 40 CFR 63.3360(f)(1), (2), or (3), as applicable.

b. Perform a periodic test once every five years for each thermal oxidizer to determine the destruction or removal efficiency according to Condition 152.a.i. If applicable, determine the mass of volatile matter retained in the coated web or otherwise not emitted to the atmosphere according to Condition 151.c.

c. Either perform a periodic test once every five years for each catalytic oxidizer to determine the destruction or removal efficiency according to Condition 152.a.i OR perform a catalyst activity test annually on each catalytic oxidizer to ensure that the catalyst is performing properly according to 40 CFR 63.3360(e)(3)(ii)(D)(1). If applicable, determine the mass of volatile matter retained in the coated web or otherwise not emitted to the atmosphere according to Condition 151.c.

(9VAC5-80-110 and 40 CFR 63.3360(a), (e), (f) and (g))

153. **MACT Subpart JJJJ (EU24, EU26, EU27, EU28, EU30, EU31, EU32, EU33, EU34 & EU35) – Compliance** – The permittee shall demonstrate compliance each month with the emission limitations in Condition 141. For each monthly demonstration, the permittee may apply any combination of the emission limitations to each of its web coating lines individually, to each of one or more groupings of its lines (including a single grouping encompassing all lines of its affected source), or to any combination of individual and grouped lines, so long as each web coating line is included in the compliance demonstration for the month (i.e., the permittee is not required to apply the same emission limitation to each of the individual lines or groups of lines). The permittee may change the emission limitation that it applies each month to its individual or grouped lines, and the permittee may change line groupings for its monthly compliance demonstration. The permittee shall demonstrate compliance according to the requirements, as applicable, in the table at 40 CFR 63.3370(a).
(9VAC5-80-110 and 40 CFR 63.3370)

Reporting

154. **MACT Subpart JJJJ (EU24, EU26, EU27, EU28, EU29, EU30, EU31, EU32, EU33, EU34 & EU35)** – **Compliance -** The permittee shall electronically submit initial notifications, notifications of compliance status, performance evaluation reports, and performance test reports, as required in 40 CFR 63.3400. Semiannual compliance reports shall be submitted electronically for the first full semiannual compliance period after the

template has been available in the Compliance and Emissions Data Reporting Interface (CEDRI) for 1 year. A copy of each report sent to EPA shall be sent to the Blue Ridge Regional Office.
(9VAC5-80-110 and 40 CFR 63.3330(a)(3))

155. **MACT Subpart JJJJ (EU24, EU26, EU27, EU28, EU30, EU31, EU32, EU33, EU34 & EU35) – Reporting** – The permittee shall submit a semiannual compliance report according to a and b below.

a. *Compliance report dates.* Each compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Each compliance report must be submitted electronically no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. The permittee may instead submit the compliance reports according to the dates in Condition 167.

b. *Compliance report contents*. The compliance report shall contain the information in i through viii below:

i. Company name and address.

ii. Statement by a responsible official with that official's name, title, and signature certifying the accuracy of the content of the report.

iii. Date of report and beginning and ending dates of the reporting period.

iv. If there are no deviations from any emission limitations (emission limit or operating limit) that apply to the permittee, a statement that there were no deviations from the emission limitations during the reporting period, and that no CMS was inoperative, inactive, malfunctioning, out-of-control, repaired, or adjusted.

v. For each deviation from an emission limitation (emission limit or operating limit) that applies to the permittee and that occurs at an affected source where the permittee is not using a CMS to comply with the emission limitations in 40 CFR 63 Subpart JJJJ, the compliance report must contain the following information:

(1) The total operating time of the web coating line(s) during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause), if applicable, and the corrective action taken.

(3) An estimate of the quantity of each regulated pollutant emitted over the emission limits in Condition 141 for each monthly period covered in the

report if the source failed to meet an applicable emission limit of 40 CFR 63 Subpart JJJJ.

vi. For each deviation from an emission limit occurring at an affected source where the permittee is using a CEMS or CPMS to comply with the emission limit in 40 CFR 63 Subpart JJJJ, the permittee shall include the following information:

(1) The total operating time of the web coating line(s) during the reporting period.

(2) The date and time that each CEMS and CPMS, if applicable, was inoperative except for zero (low-level) and high-level checks.

(3) The date and time that each CEMS and CPMS, if applicable, was out-of-control, including the information in 40 CFR 63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(5) A summary of the total duration (in hours) of each deviation during the reporting period and the total duration of each deviation as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration (in hours) of CEMS and/or CPMS downtime during the reporting period and the total duration of CEMS and/or CPMS downtime as a percent of the total source operating time during that reporting period.

(8) A breakdown of the total duration of CEMS and/or CPMS downtime during the reporting period into periods that are due to monitoring equipment malfunctions, non-monitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes.

(9) The date of the latest CEMS and/or CPMS certification or audit.

(10) A description of any changes in CEMS, CPMS, or controls since the last reporting period.

(11) An estimate of the quantity of each regulated pollutant emitted over the emission limits in Condition 141 for each monthly period covered in the report if the source failed to meet an applicable emission limit of 40 CFR 63 Subpart JJJJ.

(9VAC5-80-110 and 40 CFR 63.3400(c))

156. **MACT Subpart JJJJ (EU24, EU26, EU27, EU28, EU30, EU31, EU32, EU33, EU34 & EU35) – Reporting** – The permittee shall submit a Notification of Performance Tests as specified in 40 CFR 63.7 and 63.9(e) to EPA and to the Blue Ridge Regional Office if it is complying with the emission standard using a control device and it is required to conduct a performance test of the control device. This notification and the site-specific test plan required under 40 CFR 63.7(c)(2) must identify the operating parameters to be monitored to ensure that the capture efficiency of the capture system and the control efficiency of the control device determined during the performance test are maintained. Unless EPA or DEQ objects to the parameter or requests changes, the permittee may consider the parameter approved.
(9VAC5-80-110 and 40 CFR 63.3400(d))

157. **MACT Subpart JJJJ (EU24, EU26, EU27, EU28, EU30, EU31, EU32, EU33, EU34 & EU35) – Reporting** – *Performance test reports*. The permittee shall submit performance test reports as specified in 40 CFR 63.10(d)(2) if it is using a control device to comply with the emission standard and it has not obtained a waiver from the performance test requirement or it is not exempted from this requirement by 40 CFR 63.3360(b). Catalyst activity test results required by 40 CFR 63 Subpart JJJJ are not required to be submitted but must be maintained onsite. Within 60 days after the date of completing each performance test required by 40 CFR 63 Subpart JJJJ, the permittee shall must submit the results of the performance test following the procedures specified in 40 CFR 63.3400(f)(1) through (3). The performance test reports shall be submitted electronically using the procedure in 40 CFR 63.3400(h). A copy of each report shall be sent to the Blue Ridge Regional Office within 60 days after performance test completion.
(9VAC5-80-110 and 40 CFR 63.3400(f))

158. **MACT Subpart JJJJ (EU24, EU26, EU27, EU28, EU30, EU31, EU32, EU33, EU34 & EU35) – Reporting** – *Performance evaluation reports*. The permittee shall submit the results of performance evaluations within 60 days of completing each CMS performance evaluation (as defined in 40 CFR 63.2) following the procedures specified in 40 CFR 63.3400(g)(1) through (3). The performance evaluation reports must be submitted electronically using the procedure in 40 CFR 63.3400(h). A copy of each report shall be sent to the Blue Ridge Regional Office within 60 days after each CMS performance evaluation.
(9VAC5-80-110 and 40 CFR 63.3400(g))

Recordkeeping

159. **MACT Subpart JJJJ (EU24, EU26, EU27, EU28, EU30, EU31, EU32, EU33, EU34 & EU35) – Recordkeeping** – The permittee shall maintain the following records:

a. For each deviation from an operating limit occurring at an affected source, the permittee shall record the following information.

i. The total operating time the web coating line(s) were controlled by the corresponding add-on control device and/or emission capture system during the reporting period.

ii. Date, time, duration, and cause of the deviations.

iii. If the facility determines by its monthly compliance demonstration, in accordance with 40 CFR 63.3370, as applicable, that the source failed to meet an applicable emission limit of 40 CFR 63 Subpart JJJJ, the permittee shall record the following for the corresponding affected equipment:

(1) Record an estimate of the quantity of HAP (or VOC if used a surrogate in accordance with 40 CFR 63.3360(d)) emitted in excess of the emission limit for the month, and a description of the method used to estimate the emissions.

(2) Record actions taken to minimize emissions in accordance with 40 CFR 63.3340(a), and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

b. Records of results from the annual catalyst activity test, if applicable.

c. Any records required to be maintained by 40 CFR 63 that are submitted electronically via EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

(9VAC5-80-110 and 40 CFR 63.3410(b), (c), (d) and (e))

160. **MACT Subpart JJJJ Requirements (EU24, EU26, EU27, EU28, EU30, EU31, EU32, EU33, EU34 & EU35) – Recordkeeping** – The permittee shall maintain the records specified in paragraph a below on a monthly basis in accordance with the requirements of 40 CFR 63.10(b)(1):

a. Records specified in 40 CFR 63.10(b)(2) of all measurements needed to demonstrate compliance, including:

i. Control device and capture system operating parameter data in accordance with the requirements of 40 CFR 63.3350(c), (e) and (f);

ii. Organic HAP content data for the purpose of demonstrating compliance in accordance with the requirements of 40 CFR 63.3360(c);

iii. Volatile matter and coating solids content data for the purpose of demonstrating compliance with the requirements of 40 CFR 63.3360(d);

iv. Overall control efficiency determination using capture efficiency and control device destruction or removal efficiency test results in accordance with the requirements of 40 CFR 63.3360(e) and (f); and

v. Material usage, organic HAP usage, volatile matter usage and coating solids usage and compliance demonstrations using these data in accordance with the requirements of 40 CFR 63.3370(b), (c) and (d).

b. Records specified in 40 CFR 63.10(c) for each CMS operated by the owner or operator in accordance with the requirements of 40 CFR 63.3350(b).

(9VAC5-80-110 and 40 CFR 63.3410(a))

Insignificant Emission Units

161. The following emission units at the facility are identified in the application as insignificant emission units under 9VAC5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
007T1	Ethylene glycol and dye mixing tank	9VAC5-80-720 B	Ethylene glycol (HAP)	340 gallons
01	2 Ethylene glycol storage tanks	9VAC5-80-720 B	Ethylene glycol (HAP)	250 gallons
03	Ethylene glycol storage tank	9VAC5-80-720 B	Ethylene glycol (HAP)	250 gallons
04	Ethylene glycol storage tank	9VAC5-80-720 B	Ethylene glycol (HAP)	340 gallons

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
40	Natural-gas-fired incinerators for Lines 30 & 32 (one each per line)	9VAC5-80-720 C	Criteria pollutants	<10MMBtu/hr each
41	2 Hot melt glue application units on boxing lines in Plant 1	9VAC5-80-720 B	VOC	N/A
42	Natural-gas-fired industrial air stream heater in Plant 1 rewind area	9VAC5-80-720 C	Criteria pollutants	0.714MMBtu/hr
43	17 Pilot dyeing lines with gas dryers	9VAC5-80-720 C	Criteria pollutants	0.08 MMBtu/hr each
44T	2 Diesel fuel tanks for emergency generators	9VAC5-80-720 B	VOC	200 gallons
46	2 Natural-gas-fired industrial air stream heaters in Plant 1 master service center	9VAC5-80-720 C	Criteria pollutants	1.26 MMBtu/hr each
47	3 Natural-gas-fired space heaters in Plant 2	9VAC5-80-720 A	Criteria pollutants	<10 MMBtu/hr each
48	3 Metalizing units in Plant 2	9VAC5-80-720 B	Negligible (PM, VOC)	N/A
49	Caustic soda cleaning baths	9VAC5-80-720 B	None	N/A
50	Laboratory hoods in Plant 2	9VAC5-80-720 B	VOC	N/A
51	Natural-gas-fired dryers for dye lines	9VAC5-80-720 B	VOC	<10 MMBtu/hr
52	Manual solvent cleaning	9VAC5-80-720 B	VOC	<5,000 lbs solvent

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
53	Natural-gas-fired industrial air stream heaters in Plant 2	9VAC5-80-720 C	Criteria pollutants	1.3 MMBtu/hr
54	3 Natural-gas-fired radiant space heaters in Plant 2	9VAC5-80-720 A	Criteria pollutants	0.13 MMBtu/hr each
55	Water-based parts washers (one in each plant)	9VAC5-80-720 B	VOC	30 gallon units
57	Rag compacter in Plant 2	9VAC5-80-720 B	VOC	N/A
59	Mixing and drum storage room (coating and laminating) in Plant 2	9VAC5-80-720 B	VOC	N/A
60	2 Natural-gas-fired radiant space heaters in Plant 1	9VAC5-80-720 C	Criteria pollutants	0.1 MMBtu/hr each
61	34 Natural-gas-fired dryers for Coating Lines 24 (2 dryers), 26 (2), 27 (1), 28 (4), 29 (2), 31 (3), 33 (6), 34 (7), and 35 (7)	9VAC5-80-720 C	Criteria pollutants	<10MMBtu/hr each
62	6 Natural-gas-fired incinerators for Lines 24, 26 – 29, 33 - 35	9VAC5-80-720 C	Criteria pollutants	<10MMBtu/hr each
63T	Diesel fuel tank for emergency water pump	9VAC5-80-720 B	VOC, HAP	200 gallons
64	Lathe lubricating oil use	9VAC5-80-720 B	Negligible (PM)	N/A

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
65	2 Mixing and drum storage areas in Plant 1 (R&T and silicone)	9VAC5-80-720 B	VOC	N/A
66	9 space heaters	9VAC5-80-720 A	Criteria pollutants	<10 MMBtu/hr each
67	Laboratory hoods in Plant 1	9VAC5-80-720 A	VOC	N/A
69	5 Sputtering machines (metallized coating application) & 1 pilot unit in Plant 1	9VAC5-80-720 B	Negligible (PM, VOC)	N/A
70	Pilot laminator with natural-gas-fired dryer in Plant 1	9VAC5-80-720 A	VOC and criteria pollutants	0.08 MMBtu/hr
71	3 Cooling towers (Dye House Tower, Metallizing Tower, Tower 16)	9VAC5-80-720 A	PM10	1,200 gallons/minute
72	Cooling Tower 17	9VAC5-80-720 A	PM10	800 gallons/minute
73	Cooling Tower 20	9VAC5-80-720 A	PM10	900 gallons/minute
74	Wastewater Treatment Plant	9VAC5-80-720 B	VOC (NMP)	216,000 gallons/day
75	2 Ethylene Glycol Reclaim Tanks	9VAC5-80-720 B	Ethylene Glycol (HAP)	2,000 gallons (Tank 1) 5,000 gallons (Tank 2)
76	6 Fresh n-Methyl Pyrrolidone (NMP) Tanks	9VAC5-80-720 B	VOC (NMP)	2,000 gallons (Tank 2) 3,000 gallons (Tanks 3 & 4) 4,000 gallons (Tanks 5 & 6) 7,500 gallons (Tank 37)
77	Dirty NMP Tank	9VAC5-80-720 B	VOC (NMP)	10,000 gallons (Tank 8)
78	2 Clean Ethylene Glycol Tanks (for new EG wash)	9VAC5-80-720 B	VOC, HAP (Ethylene Glycol)	10,000 gallons (Tanks 9 & 10)

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
79	Therminol 55 Emergency Dump Tank Under Roof at Plant 2	9VAC5-80-720 B	VOC	3,500 gallons
80	2 Therminol 55 Expansion Tanks on Roof at Plant 2	9VAC5-80-720 B	VOC	400 gallons & 2,336 gallons
81	2 Therminol 55 Heater Tanks at Plant 2	9VAC5-80-720 B	VOC	570 gallons & 2,100 gallons
82	Therminol 55 Storage Tank in Dyehouse Process Heat Area	9VAC5-80-720 B	VOC	1,000 gallons
83	Kerosene Storage Tank in Raw Material Tank Farm	9VAC5-80-720 B	VOC	275 gallons
84	Diesel Fuel Storage Tank in Building next to Water Storage Tank	9VAC5-80-720 B	VOC	250 gallons
85	Caustic Cylinder Wash Unit	9VAC5-80-720 B	VOC	N/A
02	Spent Dyebath Distillation Unit	9VAC5-80-720 B	VOC, HAP (Ethylene Glycol)	N/A

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9VAC5-80-110. (9VAC5-80-110)

Permit Shield & Inapplicable Requirements

162. Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and

conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR 60 Subpart VVV	*Standards of Performance for Polymeric Coating of Supporting Substrates Facilities*	Rule does not apply to coating of plastic film (40 CFR 60.741)
40 CFR 63 Subpart OOOO	*National Emission Standards for Hazardous Air Pollutants: Printing, Coating and Dyeing of Fabrics and Other Textiles*	Eastman coats and dyes film, not fabrics or other textiles.

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the Administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
(9VAC5-80-140)

General Conditions

163. **General Conditions - Federal Enforceability** - All terms and conditions in this permit are enforceable by the Administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9VAC5-80-110)

164. **General Conditions - Permit Expiration**

a. This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to DEQ consistent with the requirements of 9VAC5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

b. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.

c. If an applicant submits a timely and complete application for an initial permit or renewal under 9VAC5-80-80 F, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9VAC5 Chapter 80, until the Board takes final action on the application under 9VAC5-80-150.

d. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9VAC5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9VAC5 Chapter 80.

e. If an applicant submits a timely and complete application under section 9VAC5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9VAC5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

f. The protection under subsections F 1 and F 5 (ii) of section 9VAC5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9VAC5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9VAC5-80-80, 9VAC5-80-110 and 9VAC5-80-170)

165. **General Conditions - Recordkeeping and Reporting** - All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

a. The date, place as defined in the permit, and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of such analyses; and

f. The operating conditions existing at the time of sampling or measurement.

(9VAC5-80-110)

166. **General Conditions - Recordkeeping and Reporting** - Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
(9VAC5-80-110)

167. **General Conditions - Recordkeeping and Reporting -** The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9VAC5-80-80 G, and shall include:

    a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31; and

    b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:

        i. Exceedances of emissions limitations or operational restrictions;

        ii. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring or periodic monitoring or Compliance Assurance Monitoring (CAM), which indicate an exceedance of emission limitations or operational restrictions; or,

        iii. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

    If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semiannual reporting period."
    (9VAC5-80-110)

168. **General Conditions - Annual Compliance Certification -** Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9VAC5-80-80 G, and shall include:

    a. The time period included in the certification. The time period to be addressed is January 1 to December 31;

    b. The identification of each term or condition of the permit that is the basis of the certification;

    c. The compliance status;

d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance;

e. Consistent with subsection 9VAC5-80-110, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period; and

f. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

R3_APD_Permits@epa.gov

(9VAC5-80-110)

169. **General Conditions - Permit Deviation Reporting** - The permittee shall notify the Blue Ridge Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semiannual compliance monitoring report pursuant to Condition 167 of this permit. (9VAC5-80-110 F. 2)

170. **General Conditions - Failure/Malfunction Reporting** - In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall no later than four daytime business hours after the malfunction is discovered, notify the Blue Ridge Regional Office such failure or malfunction and within 14 days provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Blue Ridge Regional Office. (9VAC5-80-110 and 9VAC5-20-180)

171. **General Conditions - Severability** - The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit. (9VAC5-80-110)

172. **General Conditions - Duty to Comply** - The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
(9VAC5-80-110)

173. **General Conditions - Need to Halt or Reduce Activity not a Defense** - It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9VAC5-80-110)

174. **General Conditions - Permit Modification** - A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9VAC5-80-50, 9VAC5-80-1100, 9VAC5-80-1605, or 9VAC5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9VAC80-110, 9VAC5-80-190, and 9VAC5-80-260)

175. **General Conditions - Property Rights** - The permit does not convey any property rights of any sort, or any exclusive privilege.
(9VAC5-80-110)

176. **General Conditions - Duty to Submit Information** - The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9VAC5-80-110)

177. **General Conditions - Duty to Submit Information** - Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9VAC5-80-80 G.
(9VAC5-80-110)

178. **General Conditions - Duty to Pay Permit Fees** - The owner of any source for which a permit was issued under 9VAC5-80-50 through 9VAC5-80-300 shall pay annual emissions fees, as applicable, consistent with the requirements of 9VAC5-80-310 through 9VAC5-80-350 and annual maintenance fees, as applicable, consistent with the requirements of 9VAC5-80-2310 through 9VAC5-80-2350.
(9VAC5-80-110, 9VAC5-80-310 et seq., and 9VAC5-80-2310 et seq.)

179. **General Conditions - Fugitive Dust Emission Standards** - During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

    a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;

    b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;

    c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;

    d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,

    e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

    (9VAC5-80-110 and 9VAC5-50-90)

180. **General Conditions - Startup, Shutdown, and Malfunction** - At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
    (9VAC5-80-110 and 9VAC5-50-20 E)

181. **General Conditions - Alternative Operating Scenarios** - Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of

each such alternative scenario shall meet all applicable requirements including the requirements of 9VAC5 Chapter 80, Article 1.
(9VAC5-80-110)

182. **General Conditions - Inspection and Entry Requirements** - The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

    a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.

    b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.

    c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.

    d. Sample or monitor at reasonable times' substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

    (9VAC5-80-110)

183. **General Conditions - Reopening for Cause** - The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9VAC5-80-80 F. The conditions for reopening a permit are as follows:

    a. The permit shall be reopened if the Board or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

    b. The permit shall be reopened if the Administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

    c. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9VAC5-80-110 D.

    (9VAC5-80-110)

184. **General Conditions - Permit Availability** - Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request. (9VAC5-80-110 and 9VAC5-80-150)

185. **General Conditions - Transfer of Permits**

    a. No person shall transfer a permit from one location to another, unless authorized under 9VAC5-80-130, or from one piece of equipment to another.

    b. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9VAC5-80-200.

    c. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9VAC5-80-200.

    (9VAC5-80-110 and 9VAC5-80-160)

186. **General Conditions - Permit Revocation or Termination for Cause** - A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9VAC5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.
(9VAC5-80-110, 9VAC5-80-190 C, and 9VAC5-80-260)

187. **General Conditions - Duty to Supplement or Correct Application** - Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9VAC5-80-110 and 9VAC5-80-80 E)

188. **General Conditions - Stratospheric Ozone Protection** - If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(9VAC5-80-110 and 40 CFR Part 82)

189. **General Conditions - Asbestos Requirements** - The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following:

    Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150). (9VAC5-60-70 and 9VAC5-80-110)

190. **General Conditions - Accidental Release Prevention** - If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68. (9VAC5-80-110 and 40 CFR Part 68)

191. **General Conditions - Changes to Permits for Emissions Trading** - No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
    (9VAC5-80-110)

192. **General Conditions - Emissions Trading** - Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

    a. All terms and conditions required under 9VAC5-80-110, except subsection N, shall be included to determine compliance.

    b. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.

    c. The owner shall meet all applicable requirements including the requirements of 9VAC5-80-50 through 9VAC5-80-300.

    (9VAC5-80-110)

SOURCE TESTING REPORT FORMAT

Report Cover

1. Plant name and location
2. Units tested at source (indicate Ref. No. used by source in permit or registration)
3. Test Dates.
4. Tester; name, address and report date

Certification

1. Signed by team leader/certified observer (include certification date)
2. Signed by responsible company official
3. *Signed by reviewer

Copy of approved test protocol

Summary

1. Reason for testing
2. Test dates
3. Identification of unit tested & the maximum rated capacity
4. *For each emission unit, a table showing:
    a. Operating rate
    b. Test Methods
    c. Pollutants tested
    d. Test results for each run and the run average
    e. Pollutant standard or limit
5. Summarized process and control equipment data for each run and the average, as required by the test protocol
6. A statement that test was conducted in accordance with the test protocol or identification & discussion of deviations, including the likely impact on results
7. Any other important information

Source Operation

1. Description of process and control devices
2. Process and control equipment flow diagram
3. Sampling port location and dimensioned cross section Attached protocol includes: sketch of stack (elevation view) showing sampling port locations, upstream and downstream flow disturbances and their distances from ports; and a sketch of stack (plan view) showing sampling ports, ducts entering the stack and stack diameter or dimensions

Test Results

1. Detailed test results for each run
2. *Sample calculations
3. *Description of collected samples, to include audits when applicable

Appendix

1. *Raw production data
2. *Raw field data
3. *Laboratory reports
4. *Chain of custody records for lab samples
5. *Calibration procedures and results
6. Project participants and titles
7. Observers' names (industry and agency)
8. Related correspondence
9. Standard procedures

* Not applicable to visible emission evaluations